1938

University of Maine, Orono, Maine, Catalog Number with Records of the Sessions of 1937-1938

University of Maine

THE MAINE BULLETIN

Vol. XL MARCH, 1938 No. 11

University of Maine

Orono, Maine

Catalog Number with Records of the Sessions of 1937-38

Announcements for the Sessions of 1938-39

THE UNIVERSITY PRESS
ORONO, MAINE
1938

TABLE OF CONTENTS

1938

JANUARY

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

FEBRUARY

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

MARCH

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

APRIL

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAY

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULY

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

AUGUST

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SEPTEMBER

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

OCTOBER

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

NOVEMBER

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

DECEMBER

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

1939

JANUARY

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

FEBRUARY

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

MARCH

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

APRIL

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

MAY

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Calendar

1938

January 4, Tuesday, Christmas Recess ends, 8:00 A.M.
January 26, Wednesday, Final Examinations begin in Arts and Sciences and Education.
January 28, Friday, Final Examinations begin in Agriculture and Technology.
February 4, Friday, Final Examinations end. End of Fall Semester, 5:05 P.M.

SPRING SEMESTER

February 5, Saturday, Registration 8:00 A.M. to 12:00 M.
February 7, Monday, Spring Semester begins 8:00 A.M.
February 22, Tuesday, Washington's Birthday, a holiday.
March 26, Saturday, Spring Recess begins, 11:30 A.M.
March 29, Tuesday, Mid-semester reports due at Registrar's office.
April 5, Tuesday, Spring Recess ends, 8:00 A.M.
May 23, Monday-May 25, Wednesday, Entrance Examinations.
May 31, Tuesday, Final Examinations begin in Arts and Sciences and Education.
June 1, Wednesday, Final Examinations begin in Agriculture and Technology.
June 8, Wednesday, Final Examinations end.
June 10, Friday, Class Day.
June 11, Saturday, Alumni Day.
June 12, Sunday, Baccalaureate address.
June 13, Monday, Commencement.

SUMMER CAMP

June 20, Monday, Civil Engineering and Forestry Camp begins.
July 30, Saturday, Camp ends.

SUMMER SESSION

July 5, Tuesday, Registration 8:00 A.M. to 12:00 M. and 1:30 to 4:30 P.M.
July 6, Wednesday, Classes begin.
August 12, Friday, Summer Session ends, 12:00 M.

1938

FALL SEMESTER

September 12, Monday-September 13, Tuesday, Entrance Examinations.
September 14, Wednesday, Registration of freshmen. First day of Freshman Week.
September 19, Monday, Registration for transfer students, 10:00 A.M. to 12:00 M. and 2:00 to 3:00 P.M.
September 20, Tuesday, Registration for upperclassmen, 8:00 A.M. to 12:00 M. and 1:30 to 3:00 P.M.
November 22, Tuesday, Mid-semester reports due at Registrar's office.
November 23, Wednesday, Thanksgiving Recess begins, 11:30 A.M.
November 28, Monday, Thanksgiving Recess ends, 8:00 A.M.
December 16, Friday, Christmas Recess begins, 11:30 A.M.

1939

January 3, Tuesday, Christmas Recess ends, 8:00 A.M.
January 25, Wednesday, Final Examinations begin in Arts and Sciences and Education.
January 27, Friday, Final Examinations begin in Agriculture and Technology.
February 3, Friday, Final Examinations end. End of Fall Semester, 5:05 P.M.

SPRING SEMESTER

February 4, Saturday, Registration, 8:00 A.M. to 12:00 M.
February 6, Monday, Spring Semester begins, 8:00 A.M.
February 22, Wednesday, Washington's Birthday, a holiday.
March 25, Saturday, Spring Recess begins at 11:30 A.M.
March 28, Tuesday, Mid-semester reports due at Registrar's office.
April 4, Tuesday, Spring Recess ends, 8:00 A.M.
May 22, Monday-May 24, Wednesday, Entrance Examinations.
May 30, Tuesday, Final Examinations begin in Arts and Sciences and Education.
May 31, Wednesday, Final Examinations begin in Agriculture and Technology.
June 7, Wednesday, Final Examinations end.
June 9, Friday, Class Day.
June 10, Saturday, Alumni Day.
June 11, Sunday, Baccalaureate address.
June 12, Monday, Commencement.

Board of Trustees

Edward Everett Chase, B.A., President Term expires January 22, 1943	Portland
Thomas Edward Houghton, Clerk Term expires May 6, 1941	Fort Fairfield
Bertram Everett Packard, B.A., LL.B., Ed.D., ex officio	Augusta
Frank Porter Washburn Term expires January 25, 1939	Augusta
John Thomas Gyger, M.S. Term expires November 20, 1940	Portland
Eugene Boutelle Sanger, Ph.B., M.D., F.A.C.S. Term expires November 20, 1940	Bangor
Raymond Webber Davis, B.A. Term expires July 8, 1942	Guilford
William Stockdale Nutter Term expires June 5, 1943	Sanford
Harold Merle Pierce, B.A. Term expires April 22, 1940	Bangor

Executive Committee, Packard, Davis, Washburn

Officers of Administration

OFFICERS OF THE UNIVERSITY

PRESIDENT. Arthur Andrew Hauck, Alumni Hall; Campus.
DEAN OF MEN. Lamert Seymour Corbett, 27 Rogers Hall; Campus.
DEAN OF WOMEN. Edith Grace Wilson, 16 Stevens, South; 6 North Main Street.
REGISTRAR. James Adrian Gannett, Alumni Hall; 166 Main Street.
ASSISTANT REGISTRAR. Evelyn Taylor, Alumni Hall; 225 Main Street.
RECORDER. Addie Matilda Weed, Alumni Hall; Veazie.
DIRECTOR OF ADMISSIONS. Percy Fremont Crane, Alumni Hall; 32 Forest Avenue.
LIBRARIAN. Louis Tappe Ibbotson, Library; University Place.
UNIVERSITY PHYSICIAN. Walter Charles Hall, M.D., 20 Fernald Hall; Mill Street.
TREASURER. Frederick Shaw Youngs, Alumni Hall.
TREASURER EMERITUS. Charles John Dunn, 114 Main Street.
ACCOUNTANT. Irving Pierce, Alumni Hall; 34 Sixth Street, Old Town.
STEWARD. William Carl Wells, Alumni Hall; 60 Oak Street.
ALUMNI SECRETARY AND EXECUTIVE SECRETARY, ENDOWMENT AND DONATIONS. Charles Edward Crossland, 11 Fernald Hall; 144 College Road.
DIRECTOR OF PLACEMENT BUREAU. Philip Judd Brockway, 12 Fernald Hall; 67 North Main Street.
CATALOG EDITOR. Roy Merle Peterson, 3 Stevens, North; 29 Bennoch Street.

OFFICERS OF DIVISIONS OF THE UNIVERSITY

COLLEGE OF AGRICULTURE. Arthur Lowell Deering, Dean, 16 Winslow Hall; 160 College Road.
COLLEGE OF ARTS AND SCIENCES. Edward Jones Allen, Dean, 100 Stevens Hall; 378 College Road.
SCHOOL OF EDUCATION. Olin Silas Lutes, Dean, 24 Stevens, South; College Road.

College of Technology. Paul Cloke, Dean, 12 Wingate Hall; 49 Forest Avenue.

Graduate Study. George Davis Chase, Dean, 140 Stevens Hall; 143 Main Street.

Summer Session. Roy Merle Peterson, Director, 3 Stevens, North; 29 Bennoch Street.

Agricultural Extension Service. Arthur Lowell Deering, Director, 16 Winslow Hall; 160 College Road.

Maine Agricultural Experiment Station. Fred Griffee, Director, Holmes Hall; 55 Bennoch Street.

Technology Experiment Station. Paul Cloke, Director, 12 Wingate Hall; 49 Forest Avenue.

OF THE DEPARTMENTS

Agricultural Economics and Farm Management. Professor Merchant, 36 Winslow Hall; 39 Mill Street.

Agricultural Education. Professor Hill, 35 Winslow Hall; University Place.

Agronomy and Agricultural Engineering. Professor Chucka, 2 Agricultural Engineering Building; 65 Forest Avenue.

Animal Industry. Professor Corbett, 27 Rogers Hall; Campus.

Bacteriology and Biochemistry. Professor Hitchner, 13 Winslow Hall; 51 Bennoch Street.

Biology (Agricultural Experiment Station). Professor Dove, Holmes Hall; 142 Park Street.

Botany and Entomology. Professor Steinmetz, 24 Coburn Hall; 38 North Main Street.

Chemistry and Chemical Engineering. Professor Bradt, 329 Aubert Hall; 6 North Main Street.

Chemistry (Agricultural Experiment Station). Professor Tobey, Holmes Hall; 5 Pond Street.

Civil Engineering. Professor Evans, 21 Wingate Hall; 8 Kell Street.

Classics. Professor Chase, 140 Stevens Hall; 143 Main Street.

Economics and Sociology. Professor Kirshen, 46 Stevens, South; 104 North Main Street.

Education. Professor Lutes, 24 Stevens, South; College Road.

Electrical Engineering. Professor Barrows, 2 Lord Hall; 40 Myrtle Street.

Engineering Drafting. Professor Kent, 30 Wingate Hall; 16 Sixth Street, Bangor.

English. Professor Ellis, 200 Stevens Hall; 29 Park Street.
Entomology (Agricultural Experiment Station). Professor Lathrop, Holmes Hall; 139 Main Street.
Forestry. Professor Demeritt, 24 Winslow Hall; 15 University Place.
German. Professor Drummond, 325 Stevens Hall; 61 Bennoch Street.
History and Government. Professor Dow, 145 Stevens Hall; Bennoch Road.
Home Economics. Professor Greene, 23 Merrill Hall; 6 University Place.
Horticulture. Professor Waring, Horticulture Greenhouse; 24 University Place.
Mathematics and Astronomy. Professor Willard, 130 Stevens Hall; 100 Bennoch Street.
Mechanical Engineering. Professor Sweetser, 1 Lord Hall; 109 Main Street.
Mechanics. Professor Weston, 1 Fernald Hall; College Road.
Military Science and Tactics. Lieutenant Colonel Alcott, Armory; 6 North Main Street.
Music. Professor Sprague, 15 Stevens, North; 217 Union Street, Bangor.
Philosophy. Professor Levinson, 335 Stevens Hall; 78 North Main Street.
Physical Education. Professor Wallace, Memorial Gymnasium; 45 Park Street.
Physics. Professor Bennett, 200 Aubert Hall; 22 Myrtle Street.
Plant Pathology (Agricultural Experiment Station). Professor Folsom, Holmes Hall; 63 Forest Avenue.
Psychology. Professor Dickinson, 31 Stevens, North; 91 Bennoch Street.
Public Speaking. Professor Bailey, 240 Stevens Hall; University Place.
Pulp and Paper Technology. Professor Bray, 135 Aubert Hall; 75 Bennoch Street.
Romance Languages. Professor Peterson, 3 Stevens, North; 29 Bennoch Street.
Short Courses. Director Loring, 11 Winslow Hall; 79 Bennoch Street.
Zoology. Professor Murray, 16 Coburn Hall; 184 Main Street.

OF THE DORMITORIES

Balentine Hall, Pearl Orletta Baxter, Superintendent.
B.S. in Ed., Northwestern University, 1927; M.A., Boston University, 1937.
Balentine Hall, Edna Lawton Sheraton, Assistant Superintendent.
R.N., New England Deaconess Hospital, 1909.

COLVIN HALL, Julia Delacour Hill Whittlesey, Superintendent.
A.B., Vassar, 1896; M.A., State Teachers College, Montclair, New Jersey, 1935.
ELMS, Christine Whidden Lowe, Superintendent.
MAPLES, Gertrude Hayes, Superintendent.
NORTH HALL, Mabel Frances McGinley, Superintendent.
B.S., Maine, 1905.
SOUTH HALL, Grace Edith Vose, Director.
Diploma in Physical Education, Wellesley, 1915; B.S., New York University, 1931; M.A., 1937.

MAJOR ADMINISTRATIVE ASSISTANTS

PRESIDENT'S OFFICE. Florence Elizabeth Johnson, Secretary to the President, Alumni Hall.

DEAN'S OFFICE, COLLEGE OF AGRICULTURE. Yvonne Morin, Secretary to the Dean, 16 Winslow Hall.

DEAN'S OFFICE, COLLEGE OF ARTS AND SCIENCES. Kathleen Kelley, Secretary to the Dean, 100A Stevens Hall.

DEAN'S OFFICE, SCHOOL OF EDUCATION. Thelma Demont, Secretary to the Dean, 22 Stevens, South.

DEAN'S OFFICE, COLLEGE OF TECHNOLOGY. Mildred French Creamer, Secretary to the Dean, 12 Wingate Hall.

DEAN OF MEN'S OFFICE. Prudence Storman, Secretary to the Dean, 27 Rogers Hall.

TREASURER'S OFFICE. Dorothea Lewis Miller, Secretary to the Treasurer, Alumni Hall.

DIRECTOR OF ADMISSIONS' OFFICE. Paulyne Rowell, Secretary to the Director, B.A., Maine, 1927, Alumni Hall.

DIRECTOR'S OFFICE, MAINE AGRICULTURAL EXPERIMENT STATION. Mary Norton Cameron, Secretary to the Director, Holmes Hall.

Other Officers

LIBRARY

Dorothy Smith, Reference Librarian.
B.S., Simmons School of Library Science, 1921.
Mary Florence Reed, Cataloger.
B.A., Maine, 1929; B.S., Simmons School of Library Science, 1930.
Sally Palmer, Circulation Assistant.
B.A., Maine, 1927.
Barbara Sturgis Littlefield, General Assistant
B.A., Bates, 1935; B.S., Simmons School of Library Science, 1936.
Erma Littlefield, Clerk.

HEALTH SERVICE

Blanche Imelda Castonguay, Resident Health Nurse.
R.N., Queens Hospital, Portland, 1928.
Helen Louise O'Leary, Resident Health Nurse.
R.N., Eastern Maine General Hospital, Bangor, 1933.

BUILDINGS AND GROUNDS

James Albert Ross, Superintendent of Buildings and Grounds.
John Carroll Dempsey, Storekeeper.
John White Glover, Steam Engineer.
B.S., Maine, 1915.

Faculty of Instruction

(*Dates in parentheses indicate year of initial appointment*)

RUSSELL, FREMONT LINCOLN; B.S., Maine, 1885; V.S., New York College of Veterinary Surgeons, 1886; Professor Emeritus of Bacteriology and Veterinary Science; 38½ Oak Street.

STEVENS, JAMES STACY; B.S., Rochester, 1885; M.S., 1888; M.S., Syracuse, 1889; LL.D., Rochester, 1907; Litt.D., Maine, 1922; Dean Emeritus of the College of Arts and Sciences; 175 Main Street.

COLVIN, CAROLINE; A.B., Indiana, 1893; Ph.D., University of Pennsylvania, 1901; LL.D., Maine, 1927; Professor Emeritus of History and Government; South Hall.

SIMMONS, GEORGE EDWARD; B.S., Ohio Northern, 1902; M.S., 1905; B.Sc., Ohio State, 1909; D.Sc., Ohio Northern, 1922; Professor Emeritus of Agronomy; 7 Gilbert Street.

HART, JAMES NORRIS; B.C.E., Maine, 1885; C.E., 1890; S.M., Chicago, 1897; Sc.D., Maine, 1908; Ph.D., 1922; Dean Emeritus of the University and Professor Emeritus of Mathematics and Astronomy; 123 Main Street.

PATCH, EDITH MARION; B.S., Minnesota, 1901; M.S., Maine, 1910; Ph.D., Cornell University, 1911; Sc.D., Maine, 1937; Entomologist Emeritus; Braeside, College Road.

ABBOTT, HERBERT BURR (1920); Technician, Department of Mechanical Engineering, College of Technology; Crosby Mechanical Laboratory; 159 Stillwater Avenue, Old Town.

ALCOTT, ROBERT KERR (1935); Lieutenant Colonel, Infantry (D.O.L.), U. S. Army; LL.B., Minnesota, 1904; Professor of Military Science and Tactics; Armory; 6 North Main Street.

ALDOUS, CLARENCE MORONI (1936); B.S., Utah State, 1917; M.S., University of Minnesota, 1923; Associate Professor of Game Management, College of Agriculture; 8 Coburn; 67 Mill Street.

ALLEN, EDWARD JONES (1936); A.B., Colorado College, 1921; A.M., Columbia, 1923; Ph.D., 1936; Dean of the College of Arts and Sciences and Professor of Economics, member of Graduate Faculty; 100 Stevens; 378 College Road.

ARNOLD, FRANCES ELIZABETH (1919); B.A., Maine, 1910; M.A., 1923; Assistant Professor of Romance Languages, College of Arts and Sciences; 5 Stevens, North; 11 Pond Street.

Ashby, Stanley Royal (1930); B.A., Texas, 1904; B.A., Oxford, 1907; M.A., 1923; A.M., Harvard, 1925; Ph.D., 1927; Associate Professor of English, College of Arts and Sciences; 235 Stevens; 67 Main Street.

Ashman, Robert Irving (1930); A.B., Cornell University, 1913; M.F., Yale, 1929; Associate Professor of Forestry, College of Agriculture; 24 Winslow; 69 Mill Street.

*Ashworth, John H (1919); A.B., Emory and Henry, 1906; Ph.D., Johns Hopkins, 1914; Professor of Economics and Sociology, College of Arts and Sciences, member of Graduate Faculty.

Bailey, Mark (1920); A.B., Yale, 1915; A.M., University of Michigan, 1917; Professor and Head of Department of Public Speaking, College of Arts and Sciences; 240 Stevens; University Place.

Baker, Gregory (1935); B.S., Maine, 1924; Instructor in Forestry, College of Agriculture; 24 Winslow; 36 Myrtle Street.

Barrows, William Edward (1912); B.S., Maine, 1902; E.E., 1908; Professor and Head of Department of Electrical Engineering, College of Technology, member of Graduate Faculty; 2 Lord; 40 Myrtle Street.

Baxter, Pearle Orletta (1937); B.S. in Ed., Northwestern, 1927; M.A., Boston University, 1937; Instructor in English, College of Arts and Sciences; 225 Stevens; Balentine Hall.

Bennett, Clarence Edwin (1934); Ph.B., Brown, 1923; Sc.M., 1924; Ph.D., 1930; Assistant Professor and Acting Head of Department of Physics, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 208 Aubert; 22 Myrtle Street.

†Bliss, Warren Herbert (1931); B.S., Michigan State College, 1928; M.S., 1931; Instructor in Electrical Engineering, College of Technology.

†Bogan, Edgar Junior (1929); A.B., Miami, 1926; A.M., Princeton, 1929; Instructor in Chemistry, College of Technology.

Bowden, Ralph Freeman (1925); Technician in Department of Electrical Engineering, College of Technology; 28 Lord; 144 Park Street.

Bowie, Harold Everett (1936); B.A., Maine, 1928; M.A., 1932; Instructor in Mathematics, College of Arts and Sciences; 120 Stevens; 25 Broadway.

Bradt, Wilber Elmore (1936); A.B., Indiana University, 1922; M.A., 1924; Ph.D., 1926; Professor of Chemistry and Head of Department of Chemistry and Chemical Engineering, College of Technology, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 329 Aubert; 6 North Main Street.

---

*On leave of absence, fall semester, 1937-38.

†On leave of absence, 1937-38.

Brann, Bertrand French (1917); B.S., Maine, 1909; M.S., 1911; S.M., Massachusetts Institute of Technology, 1912; Professor of Chemistry, College of Technology; 221 Aubert; 370 College Road.

Brautlecht, Charles Andrew (1919); Ph.B., Yale, 1906; Ph.D., 1912; Professor of Chemistry and Chemical Engineering, College of Technology, member of Graduate Faculty; 333 Aubert; 63 Bennoch Street.

Bray, Paul DeCosta (1923); B.S., Maine, 1914; Ch.E., 1918; Professor and Head of Department of Pulp and Paper Technology, College of Technology, member of Graduate Faculty; 135 Aubert; 75 Bennoch Street.

Brice, Fred Mansfield (1921); Professor of Physical Education; Memorial Gymnasium; 13 Pine Street.

Bricker, Herschel Leonard (1928); A.B., Coe, 1928; Assistant Professor of Public Speaking, College of Arts and Sciences; 330 Stevens; 58 Main Street.

Brush, Edward Newcomb (1928); A.B., Vermont, 1925; A.M., Harvard, 1926; Ph.D., 1932; Associate Professor of Psychology, College of Arts and Sciences, member of Graduate Faculty; 39 Stevens, North; 391 College Road.

Bryan, Noah Rosenberger (1922); B.A., Pennsylvania State, 1913; A.M., University of Pennsylvania, 1918; Ph.D., Columbia, 1921; Associate Professor of Mathematics, College of Arts and Sciences, member of Graduate Faculty; 135 Stevens; 4 University Place.

*Buzzell, Marion Stephanie (1919); B.A., Maine, 1914; M.A., 1915; Assistant Professor of Romance Languages, College of Arts and Sciences.

Cassidy, Margaret Eileen (1937); Diploma, Sargent School for Physical Education, 1928; Part-time Instructor of the Dance; Alumni; 363 State Street, Bangor.

Caulfield, John George Leslie (1926); B.S., Maine, 1924; M.S., 1926; Assistant Professor of Pulp and Paper Technology, College of Technology; 135 Aubert; 208 French Street, Bangor.

†Chadbourne, Ava Harriet (1915); B.A., Maine, 1915; M.A., 1918; A.M., Columbia, 1919; Ph.D., 1928; Professor of Education, School of Education, member of Graduate Faculty; 14 Stevens, South; Stillwater.

Chadbourne, Walter Whitmore (1922); B.A., Maine, 1920; M.B.A., Harvard, 1922; Ph.D., 1935; Associate Professor of Economics and Sociology, College of Arts and Sciences; 30 Stevens, South; 59 College Road.

Chapman, Chauncey Wallace Lord (1919); B.S., Maine, 1914; M.S., 1921; Assistant Professor of Forestry, College of Agriculture; 24 Winslow; 13 Park Street.

---

*On leave of absence, 1937-38.

†On leave of absence, spring semester, 1937-38.

CHASE, GEORGE DAVIS (1905); A.B., Harvard, 1889; A.M., 1895; Ph.D., 1897; LL.D., Maine, 1927; Professor and Head of Department of Classics, College of Arts and Sciences, Dean of Graduate Study, and coöperating member of the faculty of the School of Education; 140 Stevens; 143 Main Street.

CHASE, HUGH DONALD (1932); S.B., Massachusetts Institute of Technology, 1931; S.M., 1932; Assistant Professor of Civil Engineering, College of Technology; 2 Fernald; 54 Pine Street.

CHUCKA, JOSEPH ANTHONY (1934); B.S., Wisconsin, 1927; M.S., 1928; Ph.D., 1930; Professor and Head of Department of Agronomy and Agricultural Engineering, College of Agriculture, member of Graduate Faculty;2 Agricultural Engineering Building; 65 Forest Avenue.

CLAPP, ROGER (1929); B.S., Cornell University, 1928; M.S., Maine, 1932; Assistant Professor of Horticulture, College of Agriculture; Horticulture Greenhouse; 505 College Road.

CLOKE, PAUL (1926); E.E., Lehigh, 1905; M.S., 1913; Eng.D., Maine, 1934; Dean of the College of Technology and Director of the Technology Experiment Station, member of Graduate Faculty; 12 Wingate; 49 Forest Avenue.

COGGESHALL, REGINALD (1936); A.B., Harvard, 1916; A.M., 1932; Assistant Professor of English, College of Arts and Sciences, and Director of University Publicity; 340 Stevens; 40 Forest Avenue.

CONEY, BEATRICE (1937); B.S., East Texas State Teachers College, 1928; M.S., Iowa State College, 1937; Assistant Professor of Home Economics, College of Agriculture; 13 Merrill; 221 Upper Main Street, Madison.

COOPER, GERALD PAUL (1936); B.S., Michigan State Normal, 1931; M.A., University of Michigan, 1932; Instructor in Zoology, College of Arts and Sciences; 25 Coburn; 15 Pond Street.

CORBETT, LAMERT SEYMOUR (1913); B.S., Massachusetts State, 1909; B.S.A., Boston University, 1909; M.S., Kentucky, 1913; Professor and Head of Department of Animal Industry, College of Agriculture, Dean of Men, member of Graduate Faculty; 27 Rogers; Campus.

CRABTREE, KENNETH GERARD (1926); S.B., Massachusetts Institute of Technology, 1923; Instructor in Electrical Engineering, College of Technology; 4 Lord; 43 Main Street.

CRANDON, MARY PERKINS (1937); B.A., Maine, 1923; M.A., Bryn Mawr, 1924; Instructor in English, College of Arts and Sciences; 220 Stevens; 33 Peters Street.

CRAWFORD, JOHN RAYMOND (1930); B.A., Culver-Stockton, 1924; M.A., State University of Iowa, 1929; Ph.D., 1931; Assistant Professor of Education and Director of Bureau of Educational Research and Service,

School of Education, member of Graduate Faculty; 18 Stevens, South; 23 Pond Street.

CREAMER, WALTER JOSEPH (1919); B.S., Maine, 1918; E.E., 1921; B.A., 1923; Associate Professor of Electrical Communication, College of Technology, Director of Freshman Week, member of Graduate Faculty; 28A Lord; 331 Center Street, Bangor.

CROFUTT, CHARLES BURTON (1926); B.A., Cornell College, 1919; M.S., State University of Iowa, 1920; Ph.D., 1923; Associate Professor of Physics, College of Arts and Sciences, member of Graduate Faculty; 300 Aubert; 30 Mill Street.

CROSBY, RUTH (1929); A.B., Mount Holyoke, 1919; A.M., Radcliffe, 1920; Ph.D., 1929; Assistant Professor of English, College of Arts and Sciences; 230 Stevens; 56 Main Street.

CURTIS, THEODORE SMALL (1930); B.S., Maine, 1923; Faculty Manager of Athletics; Memorial Gymnasium; Gilbert Street.

DAVEE, EVERETT WILLARD (1903); Instructor in Mechanical Engineering, College of Technology; Mechanical Shops; 46 College Road.

DEERING, ARTHUR LOWELL (1912); B.S., Maine, 1912; Sc.D., 1934; Dean of the College of Agriculture, member of Graduate Faculty, Director of Extension Service; 16 Winslow; 160 College Road.

DEMERITT, DWIGHT BURGESS (1934); B.S., Maine, 1922; M.F., Yale, 1923; Professor and Head of Department of Forestry, College of Agriculture, member of Graduate Faculty; 24 Winslow; 15 University Place.

DICKINSON, CHARLES ALEXIUS (1926); A.M., Clark, 1922; Ph.D., 1925; Professor and Head of Department of Psychology, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 31 Stevens, North; 91 Bennoch Street.

DIRKS, CHARLES ORVILLE (1927); B.S., Kansas State College, 1924; M.S., Iowa State College, 1925; Ph.D., Cornell University, 1935; Associate Professor of Entomology, College of Agriculture; 32 Coburn; 9 Peters Street.

DORSEY, LLEWELLYN MORSE (1917); B.S., Maine, 1916; M.S., 1923; Professor of Dairy Husbandry, College of Agriculture, member of Graduate Faculty; 28 Rogers; 67 Bennoch Street.

DOW, EDWARD FRENCH (1929); B.S., Bowdoin, 1925; A.M., Harvard, 1926; Ph.D., 1932; Associate Professor and Head of Department of History and Government, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 145 Stevens; Bennoch Road.

Dow, George Farrington (1934); B.S., Maine, 1927; M.S., 1929; Associate Professor of Agricultural Economics and Farm Management, College of Agriculture; 38 Winslow; 35 Park Street.

Drummond, Robert Rutherford (1909); B.S., Maine, 1905; Ph.D., University of Pennsylvania, 1909; Professor and Head of Department of German, College of Arts and Sciences, member of Graduate Faculty; 325 Stevens; 61 Bennoch Street.

Elliott, Wallace Henry (1937); B.S., Maine, 1926; M.S., Cornell University, 1937; Assistant Professor of Agricultural Education, College of Agriculture; 35 Winslow; 52 Park Street.

*Ellis, Milton (1919); B.A., Maine, 1907; M.A., 1908; A.M., Harvard, 1909; Ph.D., 1913; Professor and Head of Department of English, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 200 Stevens; 29 Park Street.

Evans, Weston Sumner (1920); B.S., Maine, 1918; M.S., 1923; Professor and Head of Department of Civil Engineering, College of Technology, member of Graduate Faculty; 21 Wingate; 8 Kell Street.

Filachione, Edward Mario (1937); B.S., Illinois, 1931; Ph.D., Northwestern, 1935; Instructor in Chemistry, College of Technology; 421 Aubert; 106 North Main Street.

*Fitch, Albert Lewis (1919); A.B., Albion, 1911; A.M., 1912; Ph.D., University of Michigan, 1916; Professor of Physics, College of Arts and Sciences, member of Graduate Faculty.

Flewelling, Howard Lloyd (1932); A.B., Dartmouth, 1921; M.A., Maine, 1929; Ph.D., University of Michigan, 1932; Assistant Professor of English, College of Arts and Sciences; 230 Stevens; 13 Pond Street.

Fuller, John Langworthy (1937); B.S., Bates, 1931; Ph.D., Massachusetts Institute of Technology, 1935; Instructor in Zoology, College of Arts and Sciences; 21a Coburn; 35 Forest Avenue.

Gannett, James Adrian (1908); B.S., Maine, 1908; M.A., 1928; Registrar; Alumni; 166 Main Street.

Gardner, Leigh Philbrook (1920); B.S., Maine, 1918; M.S., 1923; Assistant Professor of Poultry Husbandry, College of Agriculture; Poultry Building; 46 North Main Street.

Gilliland, William Lester (1927); B.S., University of Washington, 1920; M.S., 1921; Ph.D., Massachusetts Institute of Technology, 1925; Assistant Professor of Chemistry, College of Technology; 423 Aubert; 26 Myrtle Street.

---

*On leave of absence, fall semester, 1937-38.

GLANVILLE, ALBERT DOUGLAS (1937); A.B., Cornell University, 1927; M.A., Illinois, 1928; Ph.D., Cornell University, 1932; Instructor in Psychology, College of Arts and Sciences; 39 Stevens, North; 391 College Road.

GOODSPEED, ALLEN WRIGHT (1934); B.S., Maine, 1928; M.F., Yale, 1929; Associate Professor of Forestry, College of Agriculture; 24 Winslow; 188 Main Street.

GOULD, GLADYS MARIE (1928); B.S., Maine, 1922; Part-time Instructor in Home Economics in charge of Student Teaching, College of Agriculture; Brewer High School; 33 Park Street, Brewer.

GREENE, PEARL STUART (1923); B.A., Northwestern, 1909; B.S., Lewis Institute, 1914; A.M., Columbia, 1923; Professor and Head of Department of Home Economics, College of Agriculture, member of Graduate Faculty; 23 Merrill; 6 University Place.

HALL, HOWE WIGGIN (1923); B.S., Maine, 1914; M.S., 1925; Assistant Professor of Animal Husbandry, College of Agriculture; 25 Rogers; 24 Crosby Street.

HARABOSKY, ROMAN HENRY (1937); Sergeant (D.E.M.L.), Coast Artillery, U. S. Army; Instructor in Military Science and Tactics; Armory; 6 Mill Street.

HAUCK, ARTHUR ANDREW (1934); A.B., Reed, 1915; Ph.D., Columbia, 1932; LL.D., Lafayette, 1936; LL.D., New Hampshire, 1937; President of the University; Alumni; Campus.

HAW, JOSEPH CUMMING (1936); United States Military Academy, 1937; Lieutenant Colonel, Coast Artillery Corps (D.O.L.), U. S. Army; Professor of Military Science and Tactics; Armory; 25 Parkview Avenue, Bangor.

HENKLE, HARRY LYNN (1937); Major, Infantry (D.O.L.), U. S. Army; Professor of Military Science and Tactics; Armory; 17 Peters Street.

HIGHLANDS, MATTHEW EDWARD (1935); B.A., Maine, 1928; S.M., Massachusetts Institute of Technology, 1934; Assistant Professor of Bacteriology, College of Agriculture; 13 Winslow; 54 Main Street.

HILL, ARTHUR ST. JOHN (1918); E.E., Polytechnic Institute of Brooklyn, 1911; M.S.E., University of Michigan, 1932; E.E., 1937; Professor of Electrical Engineering, College of Technology, member of Graduate Faculty; 5 Lord; Kell Street.

HILL, HERBERT STAPLES (1918); A.B., Bowdoin, 1905; Professor and Head of Department of Agricultural Education, College of Agriculture; 35 Winslow; University Place.

HITCHNER, ELMER REEVE (1922); B.S., Pennsylvania State, 1915; M.S., 1916; Ph.D., Wisconsin, 1931; Professor of Bacteriology and Head of Department of Bacteriology and Biochemistry, College of Agriculture, member of Graduate Faculty; 13 Winslow; 51 Bennoch Street.

HOBBAH, REGINALD VYVYAN (1937); B.S., University of Pittsburgh, 1931; M.A., 1934; Instructor in Economics, College of Arts and Sciences; 44 Stevens, South; 51 North Main Street.

HUDDILSTON, JOHN HOMER (1899); B.A., Baldwin-Wallace, 1890; M.A., 1892; A.B., Harvard, 1893; Ph.D., Munich, 1898; Professor of Ancient Civilization and Lecturer on Art History, College of Arts and Sciences; 36 Stevens, South; 193 Main Street.

HYLAND, FAY (1926); B.S., Michigan State College, 1925; M.S., Maine, 1929; Assistant Professor of Botany, College of Agriculture; 31 Coburn; 180 Main Street.

IBBOTSON, LOUIS TAPPE (1928); A.B., Hamilton, 1922; B.L.S., University of the State of New York, 1925; Librarian; Library; University Place.

JACKMAN, ERNEST DELMORE (1930); A.B., Colby, 1912; A.M., Columbia, 1924; Associate Professor of Education and Director of Teacher Training, School of Education; 10 Stevens, South; College Road.

JENKINS, CHESTER ALBERT (1928); B.S., Dartmouth, 1911; M.S., Maine, 1931; Professor of Physical Education; Memorial Gymnasium; University Place.

JENNESS, LYLE CLAYTON (1923); B.S., New Hampshire, 1922; M.S., Maine, 1925; Associate Professor of Chemistry, College of Technology; 429 Aubert; 80 Forest Avenue.

JONES, MAURICE DANIEL (1913); B.S., Maine, 1912; M.S., 1927; Professor of Agricultural Economics and Farm Management and Manager of University Farm, College of Agriculture, member of Graduate Faculty; 36 Winslow; 164 College Road.

JORDAN, MAYNARD FRED (1919-21) (1925); B.A., Maine, 1916; M.A., 1921; Associate Professor of Mathematics and Astronomy, College of Arts and Sciences; 130 Stevens; University Place.

KENT, BENJAMIN CALVIN (1918); B.S., Maine, 1912; Professor and Head of Department of Engineering Drafting, College of Technology; 30 Wingate; 16 Sixth Street, Bangor.

KENYON, WILLIAM CURTIS (1926); Instructor in Physical Education; Memorial Gymnasium; 83 Main Street.

KIMBALL, SPOFFORD HARRIS (1936); B.S., Denison, 1923; M.A., Pittsburgh, 1925; M.A., Harvard, 1929; Ph.D., 1932; Instructor in Mathematics, College of Arts and Sciences; 135 Stevens; 66 College Road.

KIRSHEN, HIMY BENJAMIN (1929); B.S., Whitman, 1926; A.M., Columbia, 1929; Ph.D., Wisconsin, 1937; Associate Professor and Acting Head of Department of Economics and Sociology, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 46 Stevens, South; 104 North Main Street.

KLEIN, JOHN FREDERICK (1933); A.B., Cornell University, 1912; A.M., 1913; Ph.D., 1920; Associate Professor of German, College of Arts and Sciences; 320 Stevens; 66 College Road.

KNOWLTON, THOMAS ANSON (1936); B.A., Maine, 1933; M.A., 1934; Instructor in Economics and Sociology, College of Arts and Sciences; 44 Stevens, South; 88 North Main Street.

*LAMOREAU, FRED LINCOLN (1930); B.A., Maine, 1930; M.A., 1934; Instructor in Mathematics and Astronomy, College of Arts and Sciences.

LAMSON, HERBERT DAY (1935); Ph.B., Brown, 1924; A.M., 1925; A.M., Harvard, 1934; Ph.D., 1935; Assistant Professor of Economics and Sociology, College of Arts and Sciences; 42 Stevens, South; 77 Bennoch Street.

LARSEN, KARL DAVIS (1934); B.A., Maine, 1929; M.A., 1930; Ph.D., Pennsylvania State, 1934; Assistant Professor of Physics, College of Arts and Sciences; 306 Aubert; 39 Pine Street.

LEAVITT, HAROLD WALTER (1917); B.S., Maine, 1915; C.E., 1918; M.S., 1921; Professor of Highway Engineering, and Secretary of Technology Experiment Station, College of Technology; 5 Wingate; 7 Park Street.

LEKBERG, HOWARD PARKER (1937); B.S., Worcester Polytechnic Institute, 1932; Instructor in Mechanical Engineering, College of Technology; 14 Lord; 43 Pine Street.

LENGYEL, HELEN ANNA (1924); Diploma, Sargent School for Physical Education, 1915; B.A., Maine, 1927; M.A., 1936; Associate Professor of Physical Education for Women; Alumni; 11 Main Street.

LEROY, GAYLORD CLARKE (1934); A.B., Oberlin, 1930; A.M., Harvard, 1931; Ph.D., 1935; Instructor in English, College of Arts and Sciences; 345 Stevens; 158 Main Street.

†LEVINSON, RONALD BARTLETT (1926); A.B., Harvard, 1919; Ph.D., Chicago, 1924; Professor and Head of Department of Philosophy, College of Arts and Sciences, member of Graduate Faculty; 335 Stevens; 78 North Main Street.

LIBBY, WINTHROP CHARLES (1934); B.S., Maine, 1932; M.S., 1933; Assistant Professor of Agronomy, College of Agriculture; 26 Winslow; 48 Main Street.

LOOSLI, REHA JOHNSON (1937); B.S., Utah State College, 1930; M.S., Cornell University, 1937; Instructor in Home Economics, College of Agriculture; 13 Merrill; 162 College Road.

---

*On leave of absence, 1937-38.

†On leave of absence, spring semester, 1937-38.

Loring, Fred Perley (1934); B.S., Maine, 1916; M.S., 1936; Director of Short Courses, College of Agriculture; 11 Winslow; 79 Bennoch Street.

Loupret, George Joseph (1936); Captain, Coast Artillery Corps (D.O.L.), U. S. Army; Professor of Military Science and Tactics; Armory; University Place.

Lucas, Warren Stanhope (1922); B.A., Maine, 1914; M.A., 1922; Assistant Professor of Mathematics, College of Arts and Sciences; 120 Stevens; 66 Park Street.

Lutes, Olin Silas (1926); A.B., Ohio University, 1915; M.A., State University of Iowa, 1923; Ph.D., 1926; Dean of the School of Education and Professor of Education, member of Graduate Faculty; 24 Stevens, South; College Road.

Lyon, Alpheus Crosby (1912); B.S., Maine, 1902; S.B., Massachusetts Institute of Technology, 1904; C.E., Maine, 1913; Associate Professor of Civil Engineering, College of Technology; 3 Wingate; 735 Main Street, Bangor.

McCarthy, Cecilia Agnes (1937); S.B., Simmons, 1917; A.M., Columbia, 1935; Instructor in Home Economics, College of Agriculture; 15A Merrill; 33 Bennoch Street.

McNeary, Matthew (1937); B.S., Pennsylvania State, 1932; Instructor in Engineering Drafting, College of Technology; 41 Wingate; 100 Main Street.

McReynolds, George Edgar (1935); A.B., Indiana, 1931; A.M., 1932; Ph.D., Clark, 1937; Instructor in History and Government, College of Arts and Sciences; 350 Stevens; 66 College Road.

Martin, Frederic Thurman (1934); Ch.E., Lehigh, 1925; Ph.D., Johns Hopkins, 1929; Instructor in Chemistry, College of Technology; 425 Aubert; 4 Myrtle Street.

Mendall, Howard Lewis (1937); B.A., Maine, 1931; M.A., 1934; Instructor in Game Management, College of Agriculture; 9 Coburn; 28 Pendleton Street, Brewer.

Merchant, Charles Henry (1924); B.S., Cornell University, 1920; M.S., 1922; Ph.D., 1928; Professor and Head of Department of Agricultural Economics and Farm Management, College of Agriculture, member of Graduate Faculty; 36 Winslow; 39 Mill Street.

Miles, Edwin Kenneth (1933); B.A., Lawrence, 1929; M.A., Northwestern, 1930; Ph.D., University of Pennsylvania, 1933; Assistant Professor of German, College of Arts and Sciences; 320 Stevens; 54 Pine Street.

Morrow, Rising Lake (1934); B.A., Wesleyan, 1923; A.M., Harvard, 1925; Ph.D., 1932; Assistant Professor of History and Government, College

of Arts and Sciences, member of Graduate Faculty; 150 Stevens; 66 College Road.

MURRAY, JOSEPH MAGEE (1934); B.A., Maine, 1925; M.A., University of Michigan, 1927; Ph.D., 1929; Professor and Head of Department of Zoology, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 16 Coburn; 184 Main Street.

MUSGRAVE, MARGUERITE RUTH (1929); B.S., Columbia, 1925; A.M., 1926; Assistant Professor of Home Economics, College of Agriculture; 31a Merrill; 33 Main Street.

NELSON, ELVEN CLIFFORD (1933); B.A., University of Colorado, 1929; M.A., 1930; Sc.D., Johns Hopkins, 1933; Assistant Professor of Zoology, College of Arts and Sciences; 14 Coburn; 86 North Main Street.

NIEDERFRANK, EVLON JOY (1935); B.S., Oregon State College, 1932; M.S., 1935; Assistant Professor of Agricultural Economics and Farm Management, College of Agriculture; 35 Winslow; 23 Crosby Street.

OSBORN, LAWRENCE LEWIS (1928); A.B., Indiana, 1924; A.M., 1927; Instructor in Chemistry, College of Technology; 421 Aubert; 14 Middle Street.

OTTO, CARL EVERETT (1924); B.A., Cincinnati, 1916; M.A., 1920; Ph.D., 1922; Assistant Professor of Chemistry, College of Technology; 207 Aubert; 430 College Road.

PARSHLEY, ELSA MADISON (1937); B.A., Smith, 1935; Instructor in Zoology, College of Arts and Sciences; 30 Coburn; 33 Bennoch Street.

PEDLOW, JOHN THOMAS (1936); B.S., Pennsylvania State, 1925; M.S., Rutgers, 1926; Ph.D., Pennsylvania State, 1934; Assistant Professor of Biochemistry, College of Agriculture; 15 Winslow; 20 Myrtle Street.

PERKINS, HARRY ROY (1917); Instructor in Mechanical Engineering, College of Technology; Mechanical Shops; Spring Street, Stillwater.

PETERSON, ROY MERLE (1918); A.B., Coe, 1906; A.M., Harvard, 1910; Ph.D., 1912; F.A.A.R.; Professor and Head of Department of Romance Languages, College of Arts and Sciences, Director of the Summer Session, Catalog Editor, member of Graduate Faculty and coöperating member of the faculty of the School of Education; 3 Stevens, North; 29 Bennoch Street.

PHINNEY, ARCHIE ELLSWORTH (1934); Major, Infantry (D.O.L.), U. S. Army; Professor of Military Science and Tactics; Armory; Penobscot Exchange Hotel, Bangor.

PRAGEMAN, IRVING HENRY (1927); Ph.B., Yale, 1918; M.E., 1923; Assistant Professor of Mechanical Engineering, College of Technology; 14 Lord; 58 Main Street.

QUIMBY, MAYNARD WARD (1937); Ph.G., Massachusetts College of Pharmacy, 1929; Ph.C., 1931; B.S., Maine, 1933; M.S., Cornell University, 1934; Instructor in Botany, College of Agriculture; 26 Coburn; 175 Main Street.

RALEIGH, STEPHEN MARTIN (1934); B.S., Kansas State College, 1927; Ph.D., Minnesota, 1934; Assistant Professor of Agronomy, College of Agriculture; 26 Winslow; 150 Park Street.

REYNOLDS, CECIL JOHN (1935); B.Sc., Mount Allison, 1926; B.A., 1927; B.A., Oxford, 1929; B.Litt., 1930; A.M., Harvard, 1932; Instructor in English, College of Arts and Sciences; 345 Stevens; 5 Forest Avenue.

RILEY, RICHARD MCVAY (1929); B.S., Ohio University, 1926; M.S., Cornell University, 1929; Assistant Professor of Horticulture, College of Agriculture; Horticulture Greenhouse; 43 Pine Street.

RINKAUS, JOSEPH JAMES (1935); Sergeant (D.E.M.L.), U. S. Army; Instructor in Military Science and Tactics; Armory; 6 Mill Street.

ROBERTS, EVERETT LOUIS (1921); B.S., Maine, 1920; Assistant Professor of Electrical Engineering, College of Technology; 3 Lord; 5 Summer Street.

ROGERS, MARION ELIZABETH (1927); Diploma, Sargent School for Physical Education, 1927; B.A., Maine, 1930; M.A., 1936; Assistant Professor of Physical Education for Women; Alumni; University Place.

ROY, JOSEPH ABEL (1936); Sergeant (D.E.M.L.), U. S. Army; Instructor in Military Science and Tactics; Armory; 212 Center Street, Old Town.

RUNION, HOWARD LUCIUS (1936); A.B., University of Michigan, 1931; M.A., 1932; Ph.D., 1936; Instructor in Public Speaking, College of Arts and Sciences; 330 Stevens; 15 Pond Street.

SAWYER, RALPH ALBERT (1929); B.S., Norwich, 1925; Assistant Professor of Engineering Drafting, College of Technology; 41 Wingate; 19 Oak Street.

*SCAMMAN, WILLIAM FRANCIS (1926); B.A., Maine, 1908; M.A., 1930; Assistant Professor of English, College of Arts and Sciences; 245 Stevens; 84 College Road.

SEAL, PHILIP MERVIN (1937); B.S., Worcester Polytechnic, 1930; M.S., 1932; Instructor in Electrical Engineering, College of Technology; 4 Lord; 37 Pine Street.

SMALL, GEORGE WILLIAM (1929); B.A., Tennessee, 1915; M.A., Johns Hopkins, 1921; Ph.D., 1922; B.Litt., Oxford, 1927; Professor of English, College of Arts and Sciences, member of Graduate Faculty; 250 Stevens; 15 Pleasant Street.

---

*On leave of absence, spring semester, 1937-38.

SMITH, HARRY WOODBURY (1912); B.S., Maine, 1909; M.S., 1922; Ph.D., Rutgers, 1934; Professor of Biochemistry, College of Agriculture, member of Graduate Faculty; 15 Winslow; 382 College Road.

SMYTH, JOHN ROBERT (1929); B.S., Purdue, 1920; M.S., Kentucky, 1928; Professor of Poultry Husbandry, College of Agriculture; Poultry Building; 50 College Road.

SNYDER, MARY ELLA (1936); A.B., Gooding College, 1919; M.S., Iowa State College, 1936; Instructor in Home Economics, College of Agriculture; 25A Merrill; 69 Bennoch Street.

SPARROW, THERON ALONZO (1926); B.S., Maine, 1924; Instructor in Mechanical Engineering, College of Technology; 14 Lord; 10 Main Street.

SPEICHER, BENJAMIN ROBERT (1937); A.B., Denison, 1929; M.S., University of Pittsburgh, 1931; Ph.D., 1933; Instructor in Zoology, College of Arts and Sciences; 23 Coburn; 14 Middle Street.

SPRAGUE, ADELBERT WELLS (1916); B.S., Maine, 1905; A.M., Harvard, 1907; Professor and Head of Department of Music, College of Arts and Sciences; 15 Stevens, North; 217 Union Street, Bangor.

SPRAGUE, EMBERT HIRAM (1915); B.S., Dartmouth, 1900; Professor of Sanitary Engineering, College of Technology, member of Graduate Faculty; 21 Wingate; 180 Main Street.

STARR, WILMARTH HOLT (1937); B.A., Wesleyan, 1934; Ph.D., Johns Hopkins, 1937; Instructor in Romance Languages, College of Arts and Sciences; 9 Stevens, North; 4 Myrtle Street.

STEINBAUER, GEORGE PETER (1929); B.S., Minnesota, 1925; M.S., 1927; Ph.D., 1929; Assistant Professor of Botany, College of Agriculture; 8 Coburn; 66 College Road.

STEINMETZ, FERDINAND HENRY (1927); B.S., Illinois, 1915; M.S., Minnesota, 1921; Ph.D., 1926; Professor and Head of Department of Botany and Entomology, College of Agriculture, member of Graduate Faculty; 24 Coburn; 38 North Main Street.

STEPHENSON, LEONIDAS DACOSTA, JR., (1929); B.S., North Carolina State College, 1927; Instructor in Civil Engineering, College of Technology; 11 Wingate; 195 Middle Street, Old Town.

STEWART, JOHN EMMONS (1928); B.A., Maine, 1927; M.A., 1928; Instructor in Mathematics, College of Arts and Sciences; 140 Stevens; 136 Middle Street, Old Town.

STORMANN, CHARLES LINWOOD (1937); Technician, Department of Physics, College of Arts and Sciences, Departments of Chemistry and Chemical Engineering, and Civil Engineering, College of Technology; 102 Aubert; Spring Street, Stillwater.

Sweetman, Marion Deyoe (1927); B.S., Iowa State College, 1921; M.S., 1922; Ph.D., Minnesota, 1927; Professor of Home Economics, College of Agriculture, member of Graduate Faculty; 13 Merrill; 6 North Main Street.

Sweetser, William Jordan (1915); S.B., Massachusetts Institute of Technology, 1901; Professor and Head of Department of Mechanical Engineering, College of Technology, member of Graduate Faculty; 1 Lord; 109 Main Street.

Swift, Harold Clayton (1920); B.S., Maine, 1918; M.S., 1923; Assistant Professor of Agronomy and Agricultural Engineering, College of Agriculture; 26 Winslow; 40 Wiley Street, Bangor.

Tomlin, Wilbur Everett (1930); A.B., Kentucky Wesleyan, 1926; A.M., Columbia, 1931; Instructor in Chemistry, College of Technology; 213 Aubert; 56 Forest Avenue.

Turner, Albert Morton (1922); A.B., Harvard, 1912; A.M., 1914; Ph.D., 1920; Professor of English and Comparative Literature, College of Arts and Sciences, member of Graduate Faculty; 235 Stevens; 154 College Road.

Vigneras, Louis-André (1936); B. ès L., Lycée Gay-Lussac, 1920; B.A., Princeton, 1921; M.A., 1922; Ph.D., Harvard, 1934; Instructor in Romance Languages, College of Arts and Sciences; 9 Stevens, North; 4 Myrtle Street.

Wallace, Stanley Moore (1922); Diploma, New Haven Normal School of Gymnastics, 1917; Professor and Head of Department of Physical Education; Memorial Gymnasium; 45 Park Street.

Waring, James Howard (1925); B.S., Pennsylvania State, 1920; M.S., 1921; Ph.D., Michigan State College, 1930; Professor and Head of Department of Horticulture, College of Agriculture, member of Graduate Faculty; Horticulture Greenhouse; 24 University Place.

Watson, Harry Dexter (1920); B.S., Maine, 1920; M.S., 1929; Professor of Mechanical Engineering, College of Technology; 16 Lord; University Place.

Wells, Beulah Osgood (1926); B.S., Maine, 1926; A.M., Columbia, 1931; Assistant Professor of Home Economics, College of Agriculture; 35A Merrill; 60 Oak Street.

Wence, Milford Edward (1937); B.A., State University of Iowa, 1933; M.A., 1934; Ph.D., 1937; Instructor in English, College of Arts and Sciences; 220 Stevens; 88 North Main Street.

Weston, Charles Partridge (1898); B.C.E., Maine, 1896; C.E., 1899; A.M., Columbia, 1902; Professor and Head of Department of Mechanics, College of Technology; 1 Fernald; College Road.

White, Howard Rawson (1937); B.A., University of Buffalo, 1932; M. A., 1933; Ph.D., State University of Iowa, 1936; Instructor in Psychology, College of Arts and Sciences; 39 Stevens, North; 43 Main Street.

Whitmore, Albert Ames (1918); B.S., Maine, 1906; M.A., 1917; Associate Professor of History and Government, College of Arts and Sciences; 150 Stevens; 31B Mill Street.

Whitney, Walter Reginald (1928); B.S., Bowdoin, 1923; A.M., Harvard, 1935; Instructor in English, College of Arts and Sciences; 245 Stevens; 106 North Main Street.

Willard, Harley Richard (1904); A.B., Dartmouth, 1899; A.M., 1902; A.M., Yale, 1910; Ph.D., 1912; Professor and Head of Department of Mathematics and Astronomy, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 130 Stevens; 100 Bennoch Street.

Williams, Arthur Olney, Jr. (1937); S.B., Massachusetts Institute of Technology, 1934; S.M., Brown, 1936; Ph.D., 1937; Instructor in Physics, College of Arts and Sciences; 406 Aubert; 25 Myrtle Street.

Wilson, Edith Grace (1931); B.A., Southern California, 1923; M.A., 1928; Instructor in Education, School of Education, Dean of Women; 16 Stevens, South; 6 North Main Street.

Wilson, Evelyn Faye (1933); A.B., Beloit, 1921; M.A., University of Washington, 1924; Ph.D., California, 1930; Associate Professor of History and Government, College of Arts and Sciences, member of Graduate Faculty; 175 Stevens; 56 Main Street.

Witter, John Franklin (1932); B.S., Maryland, 1928; D.V.M., Michigan State College, 1932; Assistant Professor of Animal Pathology, College of Agriculture; Poultry Building; 66 College Road.

Brush, Lillian Hatfield; B.A., Lake Forest, 1923; M.A., Illinois, 1924; Ph.D., Cornell University, 1928; Lecturer in Psychology, College of Arts and Sciences; 39 Stevens, North; 391 College Road.

Turner, Percie Hopkins; A.B., Smith, 1917; A.M., 1920; A.M., Radcliffe, 1923; Ph.D., 1924; Lecturer in English, College of Arts and Sciences; 154 College Road.

Brown, Alice Lowe; A.B., Colby, 1899; Critic Teacher, School of Education; Old Town High School; 26 North Fourth Street, Old Town.

Colbath, Geraldine Lucille; A.B., Colby, 1933; Critic Teacher, School of Education; Orono High School; 9 Pine Street.

Croxford, Horace Alcander; B.A., Maine, 1930; Instructor and Critic Teacher, School of Education; Orono High School; 100 Main Street.

Grant, Grace Stetson; A.B., Colby, 1907; A.M., Middlebury, 1935; Critic Teacher, School of Education; Orono High School; 80 Pine Street.

Hathorne, Helen Louise; B.A., Maine, 1922; Critic Teacher, School of Education; Brewer High School; RFD 7, Bangor.

Merrill, Robert Bates; A.B., Colby, 1936; Critic Teacher, School of Education; Old Town High School; 10 Elm Street, Old Town.

Mutty, Marie Josephine; B.A., Maine, 1933; Critic Teacher, School of Education; Old Town High School; 60 Fourth Street, Old Town.

Robinson, Veysey Hiram; B.Ped., Maine, 1917; Instructor and Critic Teacher, School of Education; Old Town High School; 183 Middle Street, Old Town.

Blackmer, Leroy Lewis, Jr., B.S., Massachusetts State, 1937; Graduate Fellow in Physics, College of Arts and Sciences; 406 Aubert; Kappa Sigma.

Dick, Leo Alexander; B.S., Wisconsin, 1935; Graduate Fellow in Bacteriology, College of Agriculture; 13 Winslow; 51 North Main Street.

Dike, Kenneth Wilcox; B.S., Vermont, 1936; Graduate Fellow in Animal Pathology, College of Agriculture; Poultry Building; 25 Myrtle Street.

Edwards, Albert Edward; B.S., New Brunswick, 1936; Graduate Assistant in the Department of Chemistry and Chemical Engineering, College of Technology; 211 Aubert; 14 Middle Street.

Gashwiler, Jay Schooling; B.S., Oregon State, 1937; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 95 Mill Street.

Johnson, Robert Holm; B.S., Idaho, 1937; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 95 Mill Street.

Lamson, Arroll Liscomb; B.S., Connecticut State. 1933; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 12 Middle Street.

Lamson, Marguerite Brechbuhler; B.S., Connecticut State, 1934; Assistant in the Department of Economics and Sociology, College of Arts and Sciences; 42 Stevens, South; 12 Middle Street.

Lendo, Alexander Chester; B.S., Worcester Polytechnic, 1932; Assistant in the Department of Civil Engineering, College of Technology; 11 Wingate; 16 Pine Street.

Marsh, Joel White; B.S., Maine, 1935; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; Phi Kappa Sigma.

Morris, Thomas Whaley; B.S., Michigan State College, 1936; Graduate Fellow in Physics, College of Arts and Sciences; 406 Aubert; Lambda Chi Alpha.

O'Brien, Donal Francis; B.S., Rhode Island State, 1936; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 48 Pierce Street.

Perkins, Bernard Gordon; B.A., Maine, 1937; Graduate Fellow in Mathematics, College of Arts and Sciences; 120 Stevens; 37 Middle Street.

Prince, Alton Ernest; B.S., Maine, 1936; Graduate Fellow in Botany and Entomology, College of Agriculture; 26 Coburn; 279 Main Street.

Smith, Harold Winston; B.S., University of Illinois, 1936; Graduate Fellow in Dairy Husbandry, College of Agriculture; 28 Rogers; 158 Main Street.

Titcomb, Helen Ernestine; B.A., Maine, 1937; Graduate Assistant in the Department of Zoology, College of Arts and Sciences; 30 Coburn; 31 Hill Street.

Weill, Genevieve Annette; B. ès L., University of Paris, 1934; L. ès L., 1937; Exchange Student and Assistant in the Department of Romance Languages, College of Arts and Sciences; 5 Stevens, North; Balentine.

Woodbury, Harold Mace; B.S., Maine, 1937; Graduate Fellow in the Department of Physical Education; Memorial Gymnasium; Phi Kappa Sigma.

Maine Agricultural Experiment Station

COUNCIL

Arthur Andrew Hauck, Ph.D., LL.D.	*President*
Fred Griffee, Ph.D.	*Secretary*
Thomas Edward Houghton, Fort Fairfield	*Committee of Trustees*
John Thomas Gyger, M.S., Portland	
*Frank Porter Washburn, Augusta	
Arthur Lowell Deering, Sc.D.	*Dean of the College of Agriculture and Director, Extension Service*
Frank Augustus Potter, Bangor	*State Grange*
Wilson Hiram Conant, Buckfield	*State Pomological Society*
Ross Elliott, East Corinth	*State Dairymen's Association*
William George Hunton, Portland	*Honorary Member*
Edgar Brackett Lord, W. Lebanon	*Maine Livestock Breeders' Association*
Charles Conant Clements, Winterport	*Maine Poultry Improvement Association*

Elmer Robert Tobey, Ch.E.	*Members of the Station Staff*
Donald Folsom, Ph.D.	
Charles Henry Merchant, Ph.D.	
Pearl Stuart Greene, A.M.	
William Franklin Dove, Ph.D.	
Charles Harry White, Ph.C.	
Reiner Bonde, M.S.	
George Farrington Dow, M.S.	
Marion Deyoe Sweetman, Ph.D.	
Joseph Anthony Chucka, Ph.D.	
Frederick Barker Chandler, B.S.	
Russell Manley Bailey, B.S.	
Frank Heidtman Lathrop, Ph.D.	
Mary Morris Clayton, Ph.D.	
Bernie Elliott Plummer, Jr., M.S.	
Delmar Simon Fink, Ph.D.	

*Also a member of the Council ex officio as Commissioner of Agriculture.

Faculty of Investigation

ARNO, JOHN RAYMOND, Assistant in Biology.
B.S., Maine, 1936.

AVERILL, ALICE WOOD, Laboratory Assistant in Entomology.

BAILEY, DEAN MANTER, Graduate Fellow in Plant Breeding and Nutrition.
B.S., Maine, 1936.

BAILEY, RUSSELL MANLEY, Associate Biologist, Plant Breeding and Nutrition.
B.S., Maine, 1928.

BONDE, REINER, Associate Plant Pathologist.
B.S., Minnesota, 1922; M.S., Maine, 1926.

BOUCHARD, ANNA SZULINSKI, Assistant in Agricultural Economics.

BOWERS, RUTH WILMA, Assistant in Seed Analysis and Laboratory Assistant in Plant Pathology.

BRAUTLECHT, CHARLES ANDREW, Collaborating Chemist.
Ph.B., Yale, 1906; Ph.D., 1912.

BURGESS, IVA MERCHANT, Assistant in Biology.
B.S., Maine, 1923; M.S., 1925.

CHADWICK, FRANK, JR., Assistant, Animal Breeding.
B.S., Maine, 1936.

CHANDLER, FREDERICK BARKER, Assistant Biologist in Charge of Blueberry Investigations.
B.S., Maine, 1928.

CHUCKA, JOSEPH ANTHONY, Associate Biologist, Plant Breeding and Nutrition.
B.S., Wisconsin, 1927; M.S., 1928; Ph.D., 1930.

CLAYTON, MARY MORRIS, Nutritionist.
B.S., Columbia, 1918; M.S., Rochester, 1925; Ph.D., 1928.

COTTER, MARGUERITE LILLIAN, Laboratory Assistant in Biology.

COVELL, MILDRED REBECCA, Assistant in Biology.

DOVE, WILLIAM FRANKLIN, Biologist, Animal Breeding and Nutrition.
B.S., Iowa State College, 1922; M.S., Wisconsin, 1923; Ph.D., 1927.

DOW, GEORGE FARRINGTON, Associate Agricultural Economist.
B.S., Maine, 1927; M.S., 1929.

FINK, DELMAR SIMON, Assistant Biologist, Plant Breeding and Nutrition.
B.S., Wisconsin, 1930; M.S., 1931; Ph.D., 1934.

FOLSOM, DONALD, Plant Pathologist.
A.B., Nebraska, 1912; M.A., Minnesota, 1914; Ph.D., 1917.

GREENE, PEARL STUART, Home Economist.
B.A., Northwestern, 1909; B.S., Lewis Institute, 1914; A.M., Columbia, 1923.

GRIFFEE, FRED, Director.
B.S., Kansas State College, 1919; M.S., Minnesota, 1920; Ph.D., 1924.

GRIFFIN, CAROL HOWE, Assistant in Biology.
A.B., Agnes Scott College, 1935.

HAWKINS, ARTHUR, Assistant Biologist, Plant Breeding and Nutrition.
B.S., Rutgers, 1934; M.S., 1936.

HAWKINS, JOHN HENRY, Assistant Entomologist.
B.S., Illinois, 1926; M.S., Maine, 1927; Ph.D., Cornell University, 1935.

HILBORN, MERLE TYSON, Assistant Plant Pathologist.
B.S., Maine, 1932; M.S., 1934.

INMAN, CHARLES CLYDE, Administrative Assistant.

KENNEY, EMMELINE WILSON, Laboratory Assistant in Biology.

LATHROP, FRANK HEIDTMAN, Entomologist.
B.S., Clemson, 1913; M.S., Ohio State, 1915; Ph.D., 1923.

LOVEJOY, DELMAR BOYNTON, Assistant Biologist, Plant Breeding and Nutrition.
B.S., Maine, 1928; M.S., Wisconsin, 1935.

MASON, IRVIN CARROL, Assistant in Biology, Blueberry Investigations.
B.S., Maine, 1930; M.S., 1932.

MERCHANT, CHARLES HENRY, Agricultural Economist.
B.S., Cornell University, 1920; M.S., 1922; Ph.D., 1928.

MONROE, MERNA MYRTHA, Assistant in Home Economics Research.
B.S., Iowa State College, 1929; M.S., Kansas State College, 1932.

MOORE, MILLARD GEORGE, Assistant Chemist.
B.S., Maine, 1919; M.S., 1930.

MURPHY, ELIZABETH FLORENCE, Assistant in Animal Breeding and Nutrition.
B.A., Maine, 1930; M.A., 1934.

PERKINS, GLENN HAROLD, Assistant Chemist.
B.S., Maine, 1930; M.S., 1931.

PLUMMER, BERNIE ELLIOTT, JR., Associate Chemist.
B.S., Maine, 1924; M.S., 1925.

POOLER, ELAINE MARY, Chief Assistant in Agricultural Economics.

RICH, AVERY EDMUND, Graduate Fellow in Plant Pathology.
B.S., Maine, 1937.

SCHRUMPF, WILLIAM ERNEST, Assistant Agricultural Economist.
B.S., Maine, 1928; M.S., 1930.

SIMPSON, GEDDES WILSON, Assistant Entomologist.
A.B., Bucknell, 1929; A.M., Cornell University, 1931; Ph.D., 1935.

SMITH, LESTER HURLIN, Graduate Assistant in Biology.
B.S., Maine, 1937.

STEINBAUER, GEORGE PETER, Seed Analyst, Department of Inspections.
B.S., Minnesota, 1925; M.S., 1927; Ph.D., 1929.

SWEETMAN, MARION DEYOE, Collaborating Home Economist.
B.S., Iowa State College, 1921; M.S., 1922; Ph.D., Minnesota, 1927.

THORNTON, MARJORIE BERYL, Assistant in Agricultural Economics.

TOBEY, ELMER ROBERT, Chemist.
B.S., Maine, 1911; M.S., 1917; Ch.E., 1920.

WATSON, ANDREW ELWELL, Assistant Agricultural Economist.
B.S., Maine, 1934; M.S., 1936.

WHITE, CHARLES HARRY, Associate Chemist and Photographer.
Ph.C., Maine, 1899.

MAINE TECHNOLOGY EXPERIMENT STATION

Board of Control

Paul Cloke	Director
H. W. Leavitt	Secretary
W. F. Scamman	Editor of Publications
W. E. Bradt	Dept. of Chemistry and Chemical Engineering
W. S. Evans	Dept. of Civil Engineering
W. E. Barrows	Dept. of Electrical Engineering
W. J. Sweetser	Dept. of Mechanical Engineering
P. D. Bray	Dept. of Pulp and Paper Technology

Members of the Station Staff

William Edward Barrows, B.S., E.E., Professor of Electrical Engineering
Earl Freeman Bennett, S.M., Research Assistant on Soils
Robert Bruce Bradford, B.S., Highway Laboratory Assistant
Wilber Elmore Bradt, Ph.D., Professor of Chemistry
Charles Andrew Brautlecht, Ph.D., Professor of Chemistry and Chemical Engineering
Paul DeCosta Bray, B.S., Ch.E., Professor of Pulp and Paper Technology
Hugh Donald Chase, S.M., Geologist and Assistant Professor of Civil Engineering
Paul Cloke, E.E., Eng.D., Director and Dean of the College of Technology
Walter Joseph Creamer, B.S., E.E., B.A., Associate Professor of Electrical Communication
Weston Sumner Evans, M.S., Professor of Civil Engineering
William Lester Gilliland, Ph.D., Assistant Professor of Chemistry
Arthur St. John Hill, E.E., M.S.E., Professor of Electrical Engineering.
Lyle Clayton Jenness, M.S., Associate Professor of Chemistry
Harold Walter Leavitt, C.E., M.S., Secretary and Professor of Highway Engineering
Carl Everett Otto, Ph.D., Assistant Professor of Chemistry
Edna R. Bishop Otto, A.M., Research Assistant
Horace Asa Pratt, M.S., Assistant Engineer
Clayton Leonard Sawyer, Highway Laboratory Assistant
William Francis Scamman, M.A., Editor of Bulletins and Assistant Professor of English
Theron Alonzo Sparrow, B.S., Instructor in Mechanical Engineering

EMBERT HIRAM SPRAGUE, B.S., Professor of Sanitary Engineering
JOHN H. SWEATT, B.S., Bituminous Chemist for the State Highway Commission
WILLIAM JORDAN SWEETSER, S.B., Professor of Mechanical Engineering

Faculty of Extension Service

(COLLEGE OF AGRICULTURE)

Arthur Lowell Deering, Director.
B.S., Maine, 1912; Sc.D., 1934
George Edgar Lord, Assistant Director.
B.S., Maine, 1924

State Agents

Raymon Neale Atherton, Extension Economist, Marketing.
B.S., Maine, 1918
Edna Mansfield Cobb, Home Management Specialist.
B.S., Cornell University, 1928
Ralph Ashton Corbett, Assistant Dairy Specialist.
B.S., Maine, 1930
Leone Mae Dakin, Foods Specialist.
B.S., Maine, 1926
Clarence Albert Day, Extension Editor.
M.S., Maine, 1929
Richard Carlton Dolloff, County Agent Leader.
B.S., Maine, 1927
Albert Kinsman Gardner, Crops Specialist.
B.S., Maine, 1910
Milon George Huber, Extension Agricultural Engineer.
B.S., Wisconsin, 1929; B.S., 1932
Kenneth Cousins Lovejoy, State Club Leader.
B.S., Maine, 1928
Smith Charles McIntire, Extension Economist, Farm Management.
B.S., Maine, 1932.
Stacy Ross Miller, Extension Economist, Farm Management.
B.S., Maine, 1932.
Bruce Bear Miner, Assistant Extension Editor.
B.S., Cornell University, 1935
Wendall Earl Mosher, Executive Secretary to Director of Extension.
B.S., Maine, 1929
Estelle Nason, State Home Demonstration Agent Leader.
B.S., Maine, 1922
Albert Deane Nutting, Forestry Specialist.
B.S., Maine, 1927

Evelyn Marie Plummer, Assistant State Club Leader.
B.S., Maine, 1933.
Donald Winslow Reed, Extension Economist, Marketing.
B.S., Maine, 1922
Harrison Lambert Richardson, Poultry Specialist.
B.S., Maine, 1924
Helen Constance Spaulding, Clothing Specialist.
S.B., Simmons, 1913
Richard Foster Talbot, Dairy Specialist.
B.S., Maine, 1907
Oscar Lewis Wyman, Assistant Crops Specialist.
B.S., Maine, 1926

County Agents

Verne Curtis Beverly, Aroostook County.
B.S., Maine, 1920
Richard Francis Blanchard, Oxford County.
B.S., Maine, 1931
Charles Leslie Eastman, Androscoggin and Sagadahoc Counties.
B.S., Maine, 1922
Frank Wilbur Hagan, Somerset County.
B.S., Maine, 1933
Ralph William Hobson, Washington County.
B.S., Maine, 1925
John Winston Hoyt, Franklin County.
B.S., Maine, 1935
Bryce Meredith Jordan, Assistant County Agent, Aroostook County.
B.S., Maine, 1926
Raymond Harwood Lovejoy, York County.
B.S., Maine, 1921
Wesley Spaulding Norton, Kennebec County.
B.S., Maine, 1935
Philip Stewart Parsons, Waldo County.
B.S., Maine, 1934
Coleman Cedric Randall, Assistant County Agent, Penobscot County.
B.S., Maine, 1933
Lewis Pollard Roberts, Piscataquis County.
B.S., Maine, 1931
Wilfred Sherman Rowe, Cumberland County.
Melzor Stetson Smith, Penobscot County.
B.S., Maine, 1931

GARDNER BERRY TIBBETTS, Hancock County.
B.S., Maine, 1922
GEORGE FREDERIC WARREN, JR., District County Agent, Cumberland and York Counties.
B.S., Cornell University, 1935
RALPH CARLTON WENTWORTH, Knox and Lincoln Counties.
B.S., Maine, 1918

HOME DEMONSTRATION AGENTS

HORTENSE BRADBURY, Washington County.
B.S., Maine, 1935
PAULINE SMITH BUDGE, Somerset County.
B.S., Maine, 1935
RUTH ISABEL CALLAGHAN, Oxford County.
B.S., Maine, 1933
FRANCES CISAR, Piscataquis County.
B.S., South Dakota State College, 1928
CHARLOTTE ELIZABETH CLEAVES, Penobscot County.
B.S., Maine, 1931
ESTHER LOUISE DUNHAM, Knox and Lincoln Counties.
B.S., Framingham Normal, 1933
AGNES FREYER GIBBS, Cumberland County.
B.S., Framingham Normal, 1926
BARBARA HIGGINS, Waldo County.
B.S., Maine, 1930
JESSIE MILDRED LAWRENCE, Aroostook County.
B.S., Maine, 1928
EVELYN MAY LYMAN, Kennebec County.
B.S., Massachusetts State, 1931
GLADYS WINNIFRED MARBLE, York County.
S.B., Simmons, 1919
EVELYN JUNE MILLS, Hancock County.
B.S., Maine, 1933
ELIZABETH TRYON, Franklin County.
B.S., Maine, 1933
HORTENSE AGNES WELCH, Androscoggin and Sagadahoc Counties.
B.S., Maine, 1927

County Club Agents

Rachel Louise Adams, Aroostook County.
B.S., Maine, 1934
Hope Elizabeth Ashby, Cumberland County.
B.S., Maine, 1937
Spurgeon Kearney Benjamin, Waldo County.
B.S., Maine, 1935
Earle Theodore Blodgett, York County.
B.S., Maine, 1927
Clyde Elwin Higgins, Kennebec County.
B.S., Maine, 1936
Martha Corinne Merrill, Penobscot County.
B.S., Farmington Normal, 1928
Lucinda Ewer Rich, Knox and Lincoln Counties.
B.S., Maine, 1937
Wayne Schermerhorn Rich, Androscoggin and Sagadahoc Counties.
B.S., Maine, 1934
Doris Eleanor Rosen, Oxford County.
B.S., Maine, 1934

Committees of the University Faculty

ADMINISTRATION—President, College Deans, Dean of Men, Registrar, Treasurer.

ASSEMBLIES—Lutes, Watson, Loring, Morrow. Student members: Thomas L. Barker, '39, Lincoln Fish, '38, Madge E. Stacy, '39, Thomas D. Verrill, '39, Mary L. Wright, '38.

ATHLETICS—Corbett, Gardner, A. K., Kent.

COE RESEARCH FUND—Dickinson, Ashby, Brautlecht, Chase, G. D., Griffee, Hill, A. S., Hitchner, Steinmetz.

EDUCATIONAL RESEARCH—Crawford, Bennett, Brautlecht, Brush, Bryan, Evans, Fitch, Greene, Jackman, Jones, Lamson, Leavitt, Merchant, Sweetman, Watson, Weston.

ELIGIBILITY—Gannett, Curtis, Sprague, A. W., Wilson, E. G.

FINANCIAL AFFAIRS—Youngs, Kent, Pierce.

HEALTH—Hall, Corbett, Lengyel, Wallace, Wilson, E. G.

HONORS—Ellis, Arnold, Brann, Chadbourne, A. H., Crane, Creamer, Greene, Loring,

MAINE STUDIES—Hitchner, Bradt, Chase, G. D., Ellis, Ibbotson, Lutes, Morrow.

MILITARY—Alcott, Hauck, Allen, Cloke, Deering, Lutes.

PUBLICATIONS—Gannett, Coggeshall, Crawford, Ibbotson, Leavitt, Libby, W. C.

PUBLICITY—Coggeshall, Bray, Crawford, Crossland, Day, Gannett.

RADIO—Crossland, Crawford, Creamer, Larsen, Lathrop, Loring.

RHODES SCHOLARSHIP—Chase, G. D., Ashby, Bradt, Corbett, Gannett.

SCHEDULE—Weston, Dorsey, Evans, Gannett, Peterson, and College Deans.

SECONDARY SCHOOL RELATIONS—Crane, Allen, Cloke, Deering, Gannett, Lutes.

SOCIAL AFFAIRS—Watson, Corbett, McReynolds, Wilson, E. G., Youngs.

WOMEN STUDENTS—Wilson, E. G., Chadbourne, A. H., Crosby, Greene, Lengyel, Sweetman.

GENERAL INFORMATION

HISTORY

The University of Maine is a part of the public educational system of the State. It was established originally as the State College of Agriculture and the Mechanic Arts under the provisions of the Morrill Act, approved by President Lincoln in 1862. The next year the State of Maine accepted the conditions of the Act and in 1865 created a corporation to administer the affairs of the college.

The institution opened September 21, 1868, with a class of twelve members and a faculty of two teachers; Dr. Merritt Caldwell Fernald was appointed acting president. By 1871 four curricula had been arranged—Agriculture, Civil Engineering, Mechanical Engineering, and Elective. By gradual growth these curricula developed into the College of Agriculture, the College of Technology, and the College of Arts and Sciences. Women have been admitted as students since 1872, in compliance with special legal enactment. The original name was changed to the University of Maine in 1897. The School of Education was established in 1930.

The Maine Agricultural Experiment Station was established as a division of the University by act of the Legislature of 1887, as a result of the passage by Congress of the Hatch Act. It succeeded the Maine Fertilizer Control and Agricultural Experiment Station, which had been established in 1885.

The College of Law was opened in 1898. It was an integral part of the institution and until the year 1917 occupied quarters at the corner of Union and Second streets in Bangor. Later it was located on the campus at Orono. It was discontinued in 1920.

Graduate instruction has been given by various departments for many years. The first master's degree was conferred in 1881. Since 1923 graduate work has been a separate division in charge of a dean.

Beginning with 1902, a Summer Session has usually been held annually, consisting at first of five weeks, but now of six. It is designed primarily for teachers and educational administrators and for college students who desire to make up work or secure additional credits.

To provide permanently for the support of the University the Legislature in 1929 passed an act levying a tax of one mill on the general property valuation of the State.

The University is controlled by a Board of Trustees. The first Board was composed of sixteen members, each county delegation in the Legislature selecting one member. Various changes have occurred in the appointment of Trustees. At the present time seven members are appointed by the Governor of the State, with the advice and consent of the Council, for a term of seven years. One member is appointed for three years by the Governor upon the nomination of the Alumni Association. The Commissioner of Education is ex officio a member of the Board.

The institution has been served by the following presidents: Rev. Charles Frederick Allen, Dr. Merritt Caldwell Fernald, Dr. Abram Winegardner Harris, Dr. George Emory Fellows, Dr. Robert Judson Aley, Dr. Clarence Cook Little, Dr. Harold Sherburne Boardman, and Dr. Arthur Andrew Hauck.

LOCATION

The University is located in Orono, an attractive town of 3,400 population on the main line of the Maine Central Railroad. It is about half way between Kittery, the most southerly town in the State, and Fort Kent the most northerly; it is thus not far from the center of population of the State.

The extensive campus, of over two hundred acres situated about a mile from the business section of Orono, borders the Stillwater river, a branch of the Penobscot, and is of great beauty. The University is approximately nine miles distant from Bangor and three miles from Old Town. Route 2, passing the campus, connects it with these cities and offers easy access by automobile. Cars of the Bangor Hydro-Electric Company afford a half-hour trolley service in both directions.

Bangor, the third city of the State in size, has a population of about 29,000 and is an important business center. The location of the University gives students an opportunity to avail themselves of its various advantages. Old Town is a manufacturing city with about 7,200 inhabitants.

BUILDINGS AND THEIR EQUIPMENT

Balentine Hall (1914-1916).—The largest women's dormitory, with accommodations for 115 students and an infirmary. Named in honor of Elizabeth Abbott Balentine, secretary and registrar of the University, 1894-1913.

Colvin Hall (1930).—A women's dormitory with accommodations for forty-eight students. Named in honor of Dr. Caroline Colvin, Professor Emeritus of History and Government and the first dean of women at the University.

THE ELMS.—A women's dormitory located on College Road near the Stillwater bridge and accommodating thirty-three students.

HANNIBAL HAMLIN HALL (1911).—A men's dormitory with accommodations for 152 students. Named for the Hon. Hannibal Hamlin, of Hampden and Bangor, the first president of the Board of Trustees.

THE MAPLES.—A building remodelled in 1931 to serve as a women's dormitory. It accommodates forty-six students.

NORTH HALL.—A freshman women's coöperative dormitory with accommodations for twenty-eight students. It is maintained by the students under trained supervision.

OAK HALL (1937).—A modern, fireproof dormitory housing ninety-four men students. This new building like the "Oak Hall" built in 1871, which it replaces, is named for the Hon. Lyndon Oak, of Garland, a long-time member and president of the Board of Trustees.

SOUTH HALL.—A women's coöperative dormitory, located in the village of Orono, with accommodations for thirty-six students. It is maintained at minimum expense by the students under trained supervision.

ALUMNI HALL (1901) contains administrative offices, a gymnasium for women, and a Little Theatre. It received its name because of contributions made by alumni to supply a part of the funds for its erection.

ALUMNI MEMORIAL, consisting of an Indoor Field, Armory, and Gymnasium, was erected as a memorial to the Maine men who died in the service of their country in the Spanish-American and World Wars. It cost nearly $500,000, and is the gift of alumni, faculty, and friends of the University. The Indoor Field (1926), one of the largest in the country, provides ample facilities for indoor track, winter baseball practice, and military drill. The Armory (1926) houses offices and classrooms of the military unit, including an indoor rifle range. The Gymnasium (1933) contains the offices of the Athletic and Physical Education departments, equipment and training rooms for handball, boxing, wrestling, and corrective exercise, shower and locker rooms for students, faculty, and visiting teams, and an auditorium with a seating capacity of approximately 2500, used for basketball, lectures, student assemblies, banquets, and dances.

AUBERT HALL (1914) houses the Departments of Chemistry and Chemical Engineering, Pulp and Paper Technology, and Physics. It was named in honor of Alfred Bellamy Aubert, professor of chemistry from 1874 to 1909.

COBURN HALL (1888) houses the Department of Botany and Entomology and the Department of Zoology. It was named for the Hon. Abner Coburn,

of Skowhegan, a former president of the Board of Trustees and benefactor of the University.

Crosby Laboratory (1928) contains the laboratories of the Department of Mechanical Engineering. It was named for the Hon. Oliver Crosby, Class of '76, who bequeathed $100,000 for its construction.

Fernald Hall (1870), the oldest building on the campus, contains offices and classrooms used by the College of Technology, the offices of the Alumni Association and the Placement Bureau, the University Store, and the quarters of the Health Department. It was named in honor of ex-President Merritt Caldwell Fernald.

Holmes Hall (1888) is the building used by the Maine Agricultural Experiment Station. It received its name from Dr. Ezekiel Holmes, of Winthrop.

Library Building (1906) was erected and furnished by the generosity of Andrew Carnegie, who gave $55,000 for that purpose. The Hallowell Granite Works supplied the granite at a price equivalent to a gift of several thousand dollars.

Lord Hall (1904) is used by the Departments of Electrical Engineering and Mechanical Engineering. It was named for the Hon. Henry Lord, a former president of the Board of Trustees.

Merrill Hall (1931) is devoted to work in Home Economics. It was named for Dr. Leon S. Merrill, dean of the College of Agriculture from 1911 to 1933.

Rogers Hall (1928) houses the divisions of Animal Husbandry and Dairy Husbandry of the Department of Animal Industry and contains laboratories for the manufacture of dairy products. It was named in honor of Dr. Lore A. Rogers, chief of research laboratories, Bureau of Dairy Industry, U. S. Department of Agriculture.

Stevens Hall (1924), with two wings constructed in 1933, supplies accommodations for the larger part of the work of the College of Arts and Sciences and also the School of Education. It was named in honor of Dean Emeritus James S. Stevens, for many years dean of the College of Arts and Sciences.

Wingate Hall (1892) is used by the Departments of Civil Engineering and Engineering Drafting and in addition contains the Technology Experiment Station laboratories. It was named for the Hon. William P. Wingate, a former president of the Board of Trustees.

Winslow Hall (1909) is used by various departments of the College of Agriculture and the Extension Service. It was named for the late Hon. Edward B. Winslow, of Portland, a former president of the Board of Trustees.

Minor buildings comprise the Agricultural Engineering Building, Horticultural Greenhouses, Milk House, Poultry Buildings, Research Building, Stock Judging Pavilion, Mechanical Engineering Shops, Maine Christian Association Building, Observatory, Men's Infirmary, Print Shop, Home Management House, the Central Heating Plant, the President's house, several residences occupied by faculty members, and various farm buildings.

Marine Station.—The University of Maine Marine Biological Station is located at East Lamoine on the northeast shore of Frenchman's Bay within fifty miles of the University. The buildings provide adequate housing for laboratories, research workers, students, and faculty. A pier with 400 foot frontage, row boats, and a motor boat, and various types of collecting apparatus facilitate marine investigation. Both research work and organized class work are carried on at the Station in the summer.

Fraternity Houses.—The local chapters of Beta Theta Pi, Delta Tau Delta, Kappa Sigma, Lambda Chi Alpha, Phi Kappa Sigma, Sigma Alpha Epsilon, Sigma Chi, Theta Chi, Sigma Nu, and the Phi Eta Kappa Society have houses on the campus. The following chapters own houses in the vicinity of the University: Alpha Tau Omega, Phi Gamma Delta, Phi Mu Delta, and Tau Epsilon Phi on College Road, and Alpha Gamma Rho on Grove Street. These houses accommodate from twenty to fifty students each.

ATHLETIC FIELDS

Alumni Field.—Alumni Field, so called because funds required for its construction were contributed by the Alumni Association, is located at the northern end of the campus. It contains a quarter-mile cinder track, with a 220-yard straightaway, and is graded and laid out for football and track and field athletics. It contains a grandstand with a seating capacity of 2,100 and also bleachers seating 5,700. New additions include varsity and freshman baseball grounds, regarded as two of the best in New England and conforming to all major league field requirements, a freshman football field, seven clay tennis courts and one hard-surface court, and a hammer field.

Athletic Field for Women.—A field on the southern end of the campus consists of a regulation hockey field, archery range, seventy-five yards of

cinder straightaway, and a twenty-four foot jumping pit, and is well lighted by flood lights for late afternoon activities. A field house on the western border consists of a club room, a store room for athletic equipment, and kitchenette. Besides serving for instruction and rest for teams not in action, it is used for picnics, social gatherings, and as a reading room. Two new tennis courts were added to this plan during the fall of 1937, which will materially relieve the increased demand for instruction and recreation in tennis.

THE UNIVERSITY FARMS

The University farms consist of approximately 645 acres divided into two farms, one of which adjoins the campus while the other is located in Stillwater. The land under cultivation amounts to 267 acres, divided as follows: 217 acres for farm crops, ten acres for orchards, two acres for the forest nursery, eighteen acres for poultry lots, twenty acres for systematic forestry, and 378 acres of forest and pasture lands. These farm lands, together with the campus, make the University holdings at Orono and vicinity approximately 745 acres.

THE LIBRARY

The University Library contained, at the end of the academic year, 125,308 volumes and over 30,000 pamphlets, including the following: Law Library, 5,600 volumes, available for reference at the Court House in Bangor; Agricultural Experiment Station Library, 9,706 volumes, on deposit in the library building; Maine Collection, 6,000 volumes and pamphlets, shelved in the Maine Room and provided with a special card catalog; the Clinton L. Cole Marine Library, 600 volumes, in memory of Clinton L. Cole, Maine '00. The Library receives currently about 750 periodicals, the Agricultural Experiment Station, 200.

In addition to the reference and periodical rooms, the Library provides special reading rooms for Agriculture, Education, and Technology, where are assembled the books, periodicals, indexes, and abstracts pertaining to these subjects.

The library building, the gift of Andrew Carnegie, was built in 1906. The installation, in 1937, of a new lighting system, acoustical tiled ceilings, heat control, ventilating units, and new floor coverings has resulted in greatly improved conditions for study.

Elementary instruction in the use of the library is given new students

during Freshman Week. This includes lectures and practice in the use of the catalog and magazine indexes.

While the University Library is not equipped to supply books to individuals outside the University, it is glad to lend books to other libraries, to schools, and to graduates of the University when it can be done without interference with local needs. Transportation charges are payable by the borrower. Individuals wishing to borrow books should first consult their local librarian, who will forward the request, whenever necessary, to the State Library. The State Library, acting as a clearing house for book loans between libraries in the State when it cannot completely supply the material needed, may forward the request to another library.

Any book in circulation or shelved elsewhere on the campus may be recalled to the library at any time. All library books must be returned to the library before the close of the academic year in June for inventory, repair, and binding.

Library Hours

7:45 a.m.—9:30 p.m. Monday-Thursday
7:45 a.m.—9 p.m. Friday
8 a.m.—5 p.m. Saturday
2 p.m.—9:30 p.m. Sunday

THE ART COLLECTION

The place of the Fine Arts in a college curriculum in extending the range and balance of the so-called cultural studies has been recognized at Maine for many years, and the art-teaching apparatus has grown to some 7,000 reproductions covering every important school and period of western art from the earliest Egyptian down to the present-day "modern." The collection has been built up on the theory that architecture, sculpture, and painting have their recognized places in the story of human progress, and that these forms of expression have much to convey to the students of history, letters, and present-day social problems as well as to the special student of art.

The Carnegie Corporation gift of nearly 2,300 reproductions, many of these in color, gave the collection so much impetus in 1935 that special quarters for exhibition purposes were provided in the summer of 1937. The third floor of the south wing of Stevens Hall was made over into a gallery space of two rooms, a small one for American art and a large hall with wall footage augmented by a dozen movable panels providing thus some 700 square feet additional hanging space. This room displays approximately 600 reproduc-

tions, presenting a sketch of western art over a period of 4,000 years. Special stress is given to the art of ancient Greece, the Gothic age, and the period of the Italian Renaissance.

Much of the instruction in some of the courses is given in the gallery, and students are required to use this display in meeting the requirements of the different courses. In fact, the gallery stands in about the same relation to the work of the art department that the laboratories do to the departments of science. The historical and progressive point of view is kept before the eye by adequate labeling, dating, and period hanging or grouping.

From the stock of the art collection two outside extension features have been started. One of these is a Travel Exhibit of thirty pictures, showing masterpieces selected from all ages except the "modern." Reading notices accompanying these pictures add to the value of the exhibition which, available for any community in the State for a period of ten days, carries a message to many points, in a field of universal interest. The collection is also drawn upon to provide twenty of the fraternity and dormitory homes on and off the campus with two pictures each. These are exchanged each semester for two new pictures, and, as in the case of the state-wide travel exhibit, typed notices, numbered to identify them, accompany the pictures.

The gallery is open to students and public alike on week days from 9:00 to 12:00 a.m. and from 1:30 to 5:00 p.m., and on Sundays from 3:00 to 5:00 p.m.

The cabinets and cases containing the major part of the photographic collection are accessible for students and faculty in Room 36, South Wing of Stevens Hall.

Scientific Collections

The biological collections are located in Coburn Hall.

Zoology.—These collections consist of a working collection of bird skins; a display collection of bird mounts; a study collection of various other groups of both vertebrates and invertebrates. These are arranged in the various rooms and laboratories where they are best available for purposes of class use.

Botany.—These collections are situated in room 24 on the second floor. The herbarium includes several collections of considerable value, the most important of which is the one made by the late Rev. Joseph Blake and presented to the University by Mr. Jonathan G. Clark, of Bangor. It contains more than 7,000 species of both flowering and flowerless plants, and represents more especially the flora of Maine and other New England States, but includes many forms from the Western United States, Mexico, and the West Indies, and a number from many of the European and Asiatic countries, and from

Africa and Australia. The late Professor F. L. Harvey left to the herbarium the general collections accumulated during his connection with the University, and his special collection of the weeds and forage plants of Maine, comprising 300 species. Other important collections are Collins's Algae of the Maine Coast, Halsted's Lichens of New England, Halsted's Weeds, Ellis and Everhart's North American Fungi, Cook's Illustrative Fungi, Underwood's Hepaticae, Cummings and Seymour's North American Lichens.

Geology.—The geological collections of minerals, rocks, and fossils are stored on the third floor in Fernald Hall. One large wallcase, containing mineralogical specimens, is located on the first floor of Winslow Hall.

UNIVERSITY PUBLICATIONS

Maine Bulletin.—A publication issued monthly from August to May inclusive with two issues in the month of February and three issues in the month of March, to give information to the alumni and the general public. It includes the Biennial Report, the Summer Session Bulletin, and the Annual Catalog.

University of Maine Studies, Second Series.—A series of research studies by members of the faculty and graduate students, published under the direction of the Faculty of Graduate Study.

Annual Report and Other Bulletins of the Agricultural Experiment Staton.—The annual report gives a brief summary of the progress during the year on the various research projects together with pertinent weather and financial data. Other bulletins present results of completed studies or certain phases of studies for which data have been obtained sufficient to warrant conclusions.

Official Inspections bulletins contain the results of the work of inspection of agricultural seeds, commercial feeding stuffs, commercial fertilizers, drugs, foods, fungicides and insecticides.

Extension Bulletins, News, and Radio Releases are issued by the Extension Service. Single copies of bulletins and circulars will be mailed to any Maine resident who makes the request. News releases are sent to all daily and weekly newspapers. Radio releases are issued each week to four coöperating broadcasting stations in Maine.

Technology Experiment Station Publications consist of bulletins giving the results of investigations and research, and are usually sent free of charge on request.

The Maine Alumnus, published nine times during the academic year by the General Alumni Association, is sent to former students of the University who subscribe through the payment of alumni dues.

Student publications are described in the section "Student Activities."

HEALTH SERVICE

The Health Department offers certain services, including medical examination, clinic, infirmaries, and isolation to those students paying the health fee. The staff is composed of a University doctor and two nurses. Students, however, are free to consult any physician they desire but at their own expense. A clinic service, located at 20 Fernald Hall, is available daily except Sunday. There is an infirmary for men and one for women. The University Health Service cannot treat patients suffering with chronic illnesses, those requiring surgical treatment, or those in need of the services of a specialist.

PLACEMENT BUREAU

A University Placement Bureau was inaugurated in 1935 by the University in coöperation with the General Alumni Association to offer to graduates and employers a central bureau of information. The Bureau is administered with a threefold purpose, namely: (1) to discover and to increase the opportunities for employment of Maine graduates in all fields of work other than teaching; (2) to gather complete information about graduates for employers and about business concerns and trends for graduates and to help them make valuable contacts in their chosen fields; (3) to coöperate with the University departments in helping graduates to discover the kind of employment for which they have both training and interest so as to decrease as much as possible the changes and readjustments of postgraduate employment.

No charge to students, first-year graduates, or employers is made, although a nominal fee to cover clerical costs is charged older alumni wishing to register. The duties of the Bureau also include the attempt to secure part-time work during the college year and summer employment for undergraduates. The Bureau endeavors to assist the greatest number of students possible, both graduate and undergraduates, to locate satisfactory employment, and will welcome inquiries from employers regarding its policies and services.

TEACHERS' REGISTRATION BUREAU

A registration bureau for teachers, located in the office of the Dean of the School of Education in Stevens Hall, undertakes to assist properly qualified graduates and former students in securing positions. All seniors who plan to teach are urged to register with the committee. Correspondence with officials who are looking for teachers is welcomed. No fee is charged for this service to students.

STUDENT ACTIVITIES

Cooperative Government

STUDENT SENATE.—The Student Senate comprises representatives from the following groups: (a) the several fraternities, (b) the Women's Student Government, (c) the dormitories, (d) the off-campus men. As an assembly truly representative of the student body, it is recognized by the faculty and the administration as the official organ of the student body in all matters that call for discussion and adjustment between the student body and the administration. The Senate is empowered to investigate any question relative to the student body or any member thereof and to recommend action on the same to the administration. The Senate is empowered to summon before it any student or students for trial or testimony.

WOMEN'S STUDENT GOVERNMENT ASSOCIATION.—All women registered at the University of Maine are members of this association. The purpose of the organization is to encourage among the women of the University an active sense of responsibility for self government. It also attempts to promote the highest standards of honor and integrity in all matters of personal conduct. The association enacts whatever laws are necessary to maintain congenial relationships on the campus.

Religious Activities

MAINE CHRISTIAN ASSOCIATION.—The Maine Christian Association, serving students of all religious faiths, has as its object the promotion of Christian fellowship, knowledge, and service. The work is done by student committees, under the guidance of a man and a woman secretary and a group of coöperating pastors. The Association conducts religious services, discussions of practical student questions and social problems, holds retreats, sends out religious deputations to churches and schools, brings comfort to the sick, and in general seeks to meet the spiritual needs of the students. The secretaries act as representatives of several coöperating denominations. The work centers in the Maine Christian Association Building, which also serves as a union building for student activities. Its rooms for reading, rest, recreation, meals, study, and worship are open all day.

Honor Societies

There are at the University a number of honor societies designed to recognize attainment and promise in its various divisions. These elect to

membership at regular intervals according to their respective standards, those students whom they desire to honor. The tabulation below shows the scope of each society.

Phi Kappa Phi.—All colleges and the School of Education.
Alpha Zeta.—Agriculture.
Kappa Delta Pi.—School of Education.
Omicron Nu.—Home Economics.
Phi Beta Kappa.—College of Arts and Sciences.
Tau Beta Pi.—Engineering.
Xi Sigma Pi.—Forestry.

Professional and Departmental Organizations

Many departments or divisions of the University sponsor an organization to bring together students having a common interest. Such clubs with the subject in which each specializes follow.

Professional Societies

Alpha Chi Sigma.—Chemistry, Chemical Engineering, and Pulp and Paper Technology.
American Chemical Society.—Chemistry, Chemical Engineering, Pulp and Paper Technology.
Student Branch of the American Society of Civil Engineers.
Branch of the American Institute of Electrical Engineers.
Branch of the American Society of Mechanical Engineers.
Branch of the American Home Economics Association.
Kappa Phi Sigma.—Education.
Scabbard and Blade.—Military.

Departmental Clubs

Agricultural Club.
Cercle Français.—French.
Circulo Español.—Spanish.
College 4-H Club.—Boys' and Girls' Agricultural and Home Economics Clubs.
Contributors' Club.—Creative writing.
Delta Pi Kappa.—Music.
Deutscher Verein.—German.
Education Club.

Forestry Club.
Home Economics Club.
Kappa Gamma Phi.—Journalism.
Maine Masque.—Dramatics.
Sigma Delta Zeta.—Mathematics.
Sigma Mu Sigma.—Psychology.
Sodalitas Latina.—Latin.

Musical Organizations

University Band.—This organization is attached to the Military Department. Rehearsals are credited as regular class work under the Military and Music Departments. A particular aim is to develop leadership, and to this end, in coördination with the course in interpretation and conducting in the Music Department, students properly qualifying are coached to conduct the concert presentations of the band. The band plays for various university functions and games and gives concerts.

University Chorus.—This organization, open to both men and women students, has for its objective the study and public performance of choral music. Participation in college assemblies, student concerts, a National Music Week oratorio concert with the Bangor Symphony Orchestra, and the annual Bangor Music Festival comprises the program. The sharing in programs at the Festival with world-famous musicians and concert artists renders this choral work inspiring and memorable. The chorus is conducted by the Professor of Music as class work, for which students receive credit. Conditions of membership are listed under the Department of Music (Courses 25, 26).

University Orchestra.—This organization, recruited from the outstanding student talent, devotes weekly rehearsals to the study of standard and symphonic music. Its repertoire is presented in concerts on and off the campus. It accompanies the University Chorus and soloists in the annual Christmas Vespers and Music Night programs. Credit is granted for orchestra participation. Conditions are listed under the Department of Music (Courses 27, 28).

Social Fraternities and Sororities

The following fraternities and sororities have chapters, the figures in parentheses giving the dates chapters were established at the University.

Fraternities.—National: Beta Theta Pi, (1879); Kappa Sigma (1886); Alpha Tau Omega, (1891); Phi Kappa Sigma, (1898); Phi Gamma Delta, (1899); Sigma Alpha Epsilon, (1901); Sigma Chi, (1902); Theta Chi, (1907); Delta Tau Delta, (1908); Lambda Chi Alpha, (1913); Sigma Nu,

(1913); Phi Mu Delta, (1923); Alpha Gamma Rho, (1924); Tau Epsilon Phi, (1929). Local: Phi Eta Kappa, (1906).

Sororities.—National. Alpha Omicron Pi, (1908); Phi Mu, (1912); Delta Delta Delta, (1915); Pi Beta Phi, (1920); Chi Omega, (1921).

Student Publications

Maine Campus.—A newspaper published weekly during the academic year by an editorial board composed of students.

Prism.—An illustrated annual published by the junior class.

Men's Debating Society

The Debating Society is open to all students interested in forensic work. Questions of public interest are discussed. The members make a special study of the questions used for intercollegiate debating. From this group representatives are chosen to speak before luncheon clubs, grange meetings, and community gatherings, and to participate in the intercollegiate debates.

The University of New Hampshire, Bates College, Rhode Island State College, New York University, Rutgers University, the University of Vermont, Boston University, Massachusetts State College, Bowdoin College, and Colby College are among the institutions usually scheduled for these debates, which are frequently of a dual nature. Members of this society are selected to represent the University on a debating tour of Eastern institutions.

Women's Forum and Debate

Women's Forum is an outgrowth of the more formal work in debate. The forum meets once a week for the purpose of discussing informally subjects of special interest to its members. Women's intercollegiate debating is sponsored by the forum; however, no one is obligated to participate in this phase of the activity.

Women interested in formal debate have the opportunity, as in the past, to meet teams from other colleges. During the past years, the teams have taken part in debate with nearly every outstanding college in the East.

CHURCH SERVICES

Students receive a cordial welcome at the services of the churches of Orono—the Methodist Episcopal Church, St. John's Universalist Church, St. Mary's Roman Catholic Church, and the undenominational Fellowship Church. Other denominations are represented at Old Town and Bangor.

ADMISSION

ADMISSION TO THE FRESHMAN CLASS

General Requirements

Candidates for admission to the freshman class should apply to the Director of Admissions for an application card and other necessary blanks. These blanks should be returned promptly together with the application fee of $10 (and room deposit of $15 if a dormitory room is desired). *It is advisable to file application as early as* **April** *first to facilitate admission and room assignment for entrance the following September.*

Candidates must present satisfactory certificates of fitness, or pass the required examinations, and on registration day make a cash deposit covering the bills of one semester. The University admits men and women, both residents of Maine and non-residents; it reserves the right to terminate admission whenever the capacity of the University to care properly for the students has been reached.

It is requested that all entering students submit a certificate from a physician stating that they have been vaccinated for smallpox within the past seven years. If the applicant has not been vaccinated within this period it is recommended that he or she be vaccinated *early in the summer* in order to be well over the effects of the inoculation, if any, before the opening of college.

Admission from Schools in Maine

Graduates of Maine high schools or academies may be admitted on their school records provided they have completed, with recommending grades, a course of study including all the subjects needed for admission to the curriculum that they wish to follow (see page 57) and are fully recommended by their principal.

The University is interested in candidates whose character, scholastic attainments, aptitudes, interests, industry, and habits of study give definite promise of success in college work. If a candidate has a poor record during his last year or shows weakness in any subject vital to the curriculum he wishes to take in college, he may be refused admission. In general, greater weight will be given to the character of the candidate's work in the latter part of his course than to his earlier record.

Final decision regarding each candidate will be made by the University. In reaching such decision both the candidate's school record and the additional information called for below will be considered:

A. From the student. The candidate is required to submit a carefully answered questionnaire concerning favorite studies, school activities, community interests, hobbies, choice of college course, choice of a life work, and other matters bearing upon preparation for a college course. So far as possible, a personal interview will be arranged with each candidate. This information is required so that the University may better guide the students in selecting courses of study best suited to their individual abilities, aptitudes and interests.

B. From the principal and others. The principal, teachers, and adult acquaintances, known to the applicant, are asked to give confidential information regarding character, personality, school and community activities, and intellectual capacity and ability to successfully pursue a college course.

Candidates from Maine schools may also gain admission by supplementing their school records with satisfactory grades through specified entrance examinations.

Admission from Schools Outside of Maine

Candidates from secondary schools outside of Maine may be admitted on certificate of the principal, provided the school is accredited by its state university or the recognized accrediting agency of the state or region in which the school is located, or by entrance examinations of the University of Maine. Certificates issued by the regents of the University of the State of New York are accepted for any of the subjects in which admission credit is allowed, provided they have been passed with satisfactory grade. Supplementary information is also required as stated in paragraph "B" under "Admission from Schools in Maine."

Admission by Examinations

Entrance examinations are held at Orono before the fall registration of freshmen. A schedule of the examinations will be furnished on request. Candidates for admission who wish to be examined in the spring can take the examinations at their own school, provided the principal is willing to arrange for giving the tests. These examinations are given during the fourth week in May. On request of any principal the University will send the necessary examination papers. Such requests should be received before May 11.

The examinations given by the College Entrance Examination Board will be accepted by the University. These examinations will be held during the week June 18-25, 1938. All applications for these examinations must be addressed to the Secretary of the College Entrance Examination Board, 431

West 117th Street, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application. Application must be made before May 31 and must be accompanied by the examination fee of $10.00.

Information on Freshman Week

About August 12 parents of each candidate admitted will receive from the Registrar's office a letter giving detailed instruction about arrangements for Freshman Week. Parents of candidates admitted after August 12 will receive the information at the time the candidate is admitted to the University.

Reports to Parents

The record of every freshman will be carefully reviewed at the end of eight weeks and again at the close of the first half-year's work. Reports are sent to parents at each of these dates.

Subject Requirements

Requirements for the individual colleges are as follows:

College of Arts and Sciences

English	3	units
Foreign language (three years in one or two in each of two)	3 or 4	"
History	1	unit
Mathematics (Algebra and Plane Geometry)	2	units
Electives	6 or 5	"
Total	15	units

College of Agriculture
(Including Forestry and Home Economics)

English	3	units
†*Algebra	1	unit
*Plane Geometry	1	"
Science	1	"
History	1	"
Electives	8	units
Total	15	units

College of Technology

English	3	units
Foreign language (two years in one)	2	"
Algebra	2	"
Plane Geometry	1	unit
History	1	"
Science	1	"
Electives	5	units
Total	15	units

Elective Units

The electives may be selected as shown in the following table. Subjects not listed may be accepted among the electives, provided they represent a satisfactory equivalent for any of those named. In general, it is advisable that the electives be taken from the fields of language, mathematics, natural science, and social science.

---

* For admission to the Home Economics curriculum, two units in mathematics acceptable to the Committee on Admissions are required.

† For admission to the Forestry curriculum two units in algebra are recommended.

Subjects	Units Accepted		Units required and units accepted in the several colleges					
			Arts and Sciences		Agriculture		Technology	
	Min.	Max.	Req.	Acc.	Req.	Acc.	Req.	Acc.
English	3	3	3	3	3	3	3	3
French	*2	4	Three units in one language or two in each of two	2, 3, or 4		1, 2, 3, or 4	Two units in one language††	1, 2, 3, or 4
German	2	4		2, 3, or 4		1, 2, 3, or 4		1, 2, 3, or 4
Greek	2	3		2 or 3		1, 2, or 3		1, 2, or 3
Latin	2	4		2, 3, or 4		1, 2, 3, or 4		1, 2, 3, or 4
Spanish	2	3		2 or 3		1, 2, or 3		1, 2, or 3
Algebra (Elem.)	1	**2	1	2	§1	2	2	2
Plane geometry	1	1	1	1	§1	1	1	1
Solid geometry	½	½		½		½		½
Trigonometry	½	½		½		½		½
Algebra (Adv.)	½	½		½		½		½
History	1	4	1	1, 2, 3, or 4	1	1, 2, 3, or 4	1	1, 2, 3, or 4
Civics	½	1		½ or 1		½ or 1		½ or 1
Economics	½	1		½ or 1		½ or 1		½ or 1
Biology	†1	1		1	One unit in Science	1	One unit in Science	1
Botany	†1	1		1		1		1
Chemistry	†1	2		1 or 2		1 or 2		1 or 2
Physics	†1	2		1 or 2		1 or 2		1 or 2
Physiography	½	1		½ or 1		½ or 1		½ or 1
Physiology	½	1		½ or 1		½ or 1		½ or 1
Zoology	†1	1		1		1		1
General Science	½	1		½ or 1		½ or 1		½ or 1
Agriculture	1	4	Not over two units in all of these		Not over five units in all of these		Not over four units in all of these	
Domestic Science and Art	1	4						
Drawing	‡½	2						
Manual Training	‡½	2						
Commercial Subjects	½	4						
Music	½	2		½ or 2		½ or 2		½ or
Bible Study	½	1		½ or 1		½ or 1		½ or 1
Debating	½	1		½ or 1		½ or 1		½ or 1

*The minimum accepted in foreign languages applies to the College of Arts and Sciences only.

**Two units credit for elementary algebra completed. Technology can-

didates are expected to take some mathematics during their last year in school.

†The work in these subjects must include laboratory work with notebook, as specified in the detailed statement.

‡Credit for these subjects and for bookkeeping and typewriting is at the rate of one-half unit for a subject taken five forty-five minute periods per week for a year.

§See both footnotes at bottom of page 58.

††Latin or French preferred.

Requirements in Detail

ENGLISH

The course in Freshman English presupposes a study of English literature and of composition and rhetoric pursued throughout the preparatory school course. Candidates are expected to have had practice in writing equivalent to at least one composition a week during each of the four years in high school, and to have studied the elements of rhetoric in some such text as, for example, Tanner's *Rhetoric and Composition.* Experience shows that students who have had insufficient practice in writing in school are apt to have trouble in their college English.

In 1938, for the first time, the entrance examination will be of an objective nature and will test such matters as grammatical structure, spelling, capitalization, vocabulary, and literature.

FOREIGN LANGUAGES

LATIN.—The following requirements are based upon a report to the College Entrance Examination Board in 1925.

I. *Amount and range of the reading recommended.* There are no prescribed readings in Latin, but the following recommendations are made:

1. In the second year the pupil should read easy Latin of gradually increasing difficulty. This may consist in part of "made" or adapted Latin. Not less than one semester of this year should be devoted to the reading of selections from Caesar. The reading for the year may also include easy selections from such authors as Aulus Gellius, Eutropius, Nepos, Phaedrus, Quintus Curtius Rufus, and Valerius Maximus.

2. In the third year, if the reading is in prose, not less than one semester should be devoted to the reading of selections from Cicero. The reading for the year may also include selections from such authors as Pliny, Sallust, and Livy.

3. In the fourth year, if the reading is in poetry, not less than one semester should be devoted to the reading of selections from Vergil. The reading for the year may also include selections from such works as the *Metamorphoses, Tristia, Heroides,* and *Fasti* of Ovid, or books of selections containing poems or extracts from Ovid or other poets.

II. *Description of the examination.* The examination aims to test the proficiency of those who have studied Latin in a secondary course of five lessons each week extending through two, three, or four years. (An examination on forms, syntax, and easy translation is provided for candidates in Agriculture and Technology offering one year of Latin, and for candidates in Arts offering one year of Latin taken in the last two years of the high-school course.)

The paper will include:

1. Passages of Latin prose and verse for translation.

2. Passages of Latin prose and verse for comprehension. Candidates will be asked questions to test their understanding of these passages but will not be required to translate them.

3. English passages to be translated into Latin for candidates presenting two or three years of Latin. Candidates presenting four years of Latin in one examination will also be expected to answer these questions.

4. Questions on forms, syntax, and idioms in these passages, as well as such questions on subject matter, historical and literary, as may fairly be asked.

Credit will be given for passing the following College Entrance Board Examinations: Cp. 2, Cp. 3, Cp. 4, Cp. H, and Cp. K.

III. *Latin Word List.* The College Entrance Examination Board has prepared a Word List which indicates the vocabulary that students are expected to have at the end of two, three, and four years of study. Students will be expected to know accurately the words in this list.

FRENCH—I. *Elementary.*—Students who desire to receive credit for two units of high-school French should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life or based upon a portion of the French text read, and to answer questions on the fundamentals of French grammar.

II. *Intermediate.*—Those who desire credit for three units should be able to read modern prose and verse of moderate difficulty and to write a composition upon any subject within the range of everyday experience. Such students should also have a thorough knowledge of French grammar as presented by the Fraser and Squair and other textbooks of the same type, includ-

ing a thorough study of the uses of the conditionals and subjunctives, and in general of such material as may have been in the work of the first two years.

The examination of the College Entrance Certificate Board in Elementary French will be accepted for two units, and that in Intermediate French for one additional unit.

GERMAN—*Elementary.*—The first year's work should comprise: careful drill upon pronunciation and oral work; the rudiments of grammar including the inflection of nouns, pronouns, and adjectives; the conjugation of the more common weak and strong verbs; the use of the more common prepositions; the conjugation and meanings of the modal auxiliaries; the elementary rules of syntax and word order; dictation and elementary composition; the reading of 75 to 100 pages of prose and poetry.

The second year's work should include the continued study of the grammar and composition, and the reading of 150 to 200 pages of literature.

The advanced German should include constant practice in conversation and composition, and the reading of about 400 pages of moderately difficult prose and poetry.

SPANISH—*Elementary.*—The equivalent of Course 1, 2 offered by the University. The first year's work is expected to familiarize the student with the fundamental principles of grammar, special stress being laid on the study of verbs and pronouns. Dictation, the translation of simple Spanish when spoken, and some translation into Spanish to illustrate principles of grammar will be employed. About 150 pages of modern prose will be read. In the second year in addition to the continued study of the grammar and the use of suitable exercises similar to those employed in the preceding year there should be read from 300 to 400 pages belonging to modern Spanish literature.

HISTORY

One unit is required by all colleges of the University for entrance. Four may be offered.

The student will be expected to show judgment as well as memory and be able to make comparisons and give summaries. Some knowledge of geography is required, and collateral reading is essential.

I. *Greek and Roman History.*—One unit.

Greek History.—To the death of Alexander with due consideration of Greek life, literature, and art. One-half unit.

Roman History.—To 800 A.D. with emphasis on government and institutions. One-half unit.

II. *English History.*—A general knowledge of the political and social development of England; in particular the growth of the limited monarchy

with parliamentary government and the British Empire and Commonwealth. One unit.

III. *American History.*—Emphasizing political, social, and economic aspects. One unit.

IV. *Medieval and Modern History.*—One unit.

Medieval History.—To 1500. One-half unit.

Modern European History.—From 1500 to the present. One-half unit.

V. *World History.*—Beginning with ancient civilization and coming down to the present time. One unit.

MATHEMATICS

Algebra.—As algebra is a necessary foundation for successful work in advanced mathematics, all candidates expecting to continue mathematics in college should have a thorough knowledge of elementary algebra. They should offer two units.

Algebra to Quadratics.—One unit. The usual first-year course should give facility in factoring, simplification of fractions, solution of simple equations in one and two unknowns, use of graphs, exponents and radicals (simple forms), ratio and proportion.

Quadratics and Beyond.—One unit. Quadratic equations, systems of equations in which at least one is of a degree above the first, progressions, binomial theorem with integral exponents, exponents and radicals, logarithms.

Trigonometry.—One half unit. A half-year course with any standard textbook covering the definitions of the functions, the proofs of the standard formulas, proofs of identities, the solution of right and oblique triangles by natural functions and by logarithms. Simple applications of trigonometry.

Plane Geometry.—The usual theorems and constructions which treat the general properties of plane rectilinear figures, the circle and the measurements of angles, similar polygons, areas, regular polygons, and the measurement of the circle.

Solid Geometry.—The usual theorems and constructions which treat the relations of planes and lines in space; the properties and measurement of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle.

Advanced Algebra.—Permutations and combinations with applications of the theory limited to simple cases; complex numbers with graphical representation of sums and differences; determinants, chiefly of the second, third, and fourth orders; methods of evaluating such determinants including the method involving the use of minors; the application of determinants to the solution of systems of equations of the first degree; so much of the theory of equations including graphical methods, Descartes' rule of signs and Horner's method, but not Sturm's functions or multiple roots, as is necessary for the

STUDENT EXPENSES

A partial list of necessary expenses is indicated below. It includes only items which are fairly uniform for all students. The estimates are prepared upon the basis of students living in University halls. Board and room in North and South Halls are somewhat less than indicated below.

	Students from within the State			Students from without the State		
Tuition	$150.00			$250.00		
Textbooks	25.00	to	50.00	25.00	to	50.00
Board and Room	323.00			323.00		
Special Assessment for Athletics & Debating	10.50			10.50		
Health Service Fee	2.00			2.00		
	$510.50	to	$535.50	$610.50	to	$635.50

The tuition for students taking the Two-Year Course in Agriculture is $70.00 a year. Such students do not pay the special assessment for athletics and debating.

Application for Admission

A fee of $10.00 is required at the time of application. Checks should be made payable to the University of Maine. This fee is refunded if the applicant is not admitted. When the applicant enters the University the fee will be applied toward payment of the first semester's tuition.

Application for Room

A deposit of $15.00 is required at the time application is made for a room. If a student is unable to enter, the deposit will be refunded, provided the room is given up on or before August 1. If notice of withdrawal is given on or before September 1, $10.00 will be refunded. In case of withdrawal after September 1, the entire deposit is forfeited, but may be applied toward the payment for a room if the applicant enrolls in the University the following year.

When a student enters the University the deposit of $15.00 will be applied toward payment of dormitory charges.

Special Charges

A fee of $2.00 is charged a student for each special examination.

Students registering after the prescribed day of registration for the fall or spring semester shall pay an additional fee of $2.00.

Rooms

The rooms in the Maples, a freshman dormitory for women, accommodate one, two, or three students.

The rooms in Balentine Hall, accommodating one and two students each, and those in Colvin Hall, accommodating two and four students each, are available to upperclass women students. The rooms in The Elms, accommodating two and three students each, are available mainly to upperclass women students. The rooms in North and South Halls, the coöperative dormitories for women, accommodate two students each and are available to all women students. There is, however, a selection based on financial need, coöperation, and satisfactory scholarship.

The rooms in Oak Hall and the middle section of Hannibal Hamlin Hall accommodate two students each; the north and south sections of Hannibal Hamlin Hall accommodate four students each. Oak Hall and Hannibal Hamlin Hall are freshman dormitories for men.

Dormitory charges include steam heat and electric lights. The rooms in the dormitories are furnished with beds, mattresses, chiffoniers, desks, and chairs. Each resident in the dormitory has bed linen and three towels laundered each week without extra charge. Students furnish pillows, bed linen, and blankets.

Women students not living at home are required to live in one of the women's dormitories. In exceptional cases women students are allowed to live at some boarding house approved by the Dean of Women.

Applications for dormitory rooms should be addressed to the Registrar.

Gymnasium Uniform for Women

Every woman will be expected to purchase a prescribed uniform before coming to college. Information regarding uniform and place where it can be bought will be sent with admission cards. The approximate cost of the uniform is $15.00.

All women students who are using locker rooms and shower baths will be assessed fifty cents each semester for the use of towels.

Deposits to Cover Expenses

The University *requires all students to pay in advance.* The payments indicated below are required at the beginning of each semester.

Deposit	Residents of Maine	Non-Residents of Maine
Tuition	$ 75.00	$125.00
Board and Room	161.50	161.50
Key Deposit (men only)	5.00	5.00
Military Deposit (required of all men taking military instruction)	30.00	30.00
Special Assessment for Athletics and Debating	5.25	5.25
Health Service Fee	1.00	1.00
Freshman Week (Freshmen only)	8.00	8.00
	$285.75	$335.75

For students who do not room and board in University halls the above amounts are reduced by $166.50.

All men taking military are required to make a deposit of $30.00 to cover cost of equipment. This deposit is returned at the end of the year, less a charge for goods furnished, plus a charge for lost and misused equipment.

For students in the Two-Year Course in Agriculture the deposit required for tuition is $35.00.

Diploma Fee

All students receiving a degree are required to pay a diploma fee of $5.00.

Communications

Communications with reference to financial affairs of students should be addressed to the Treasurer of the University of Maine.

LOAN FUNDS

Application for loans should first be made to the Dean of Women by women students and to the Dean of Men by men students. Where requirements make necessary a different handling of loans, either of these officials will refer the request to the proper person.

KITTREDGE FUND.—This fund, amounting to over $2200, was established by Nehemiah Kittredge, of Bangor. It is in the control of the President and the Treasurer of the University, by whom it is loaned to needy students in the three upper classes. Individual loans are limited to $50.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS LOAN FUND.—This fund, now amounting to $185, was established by the University of Maine Branch in 1918 for the purpose of assisting needy students majoring in electrical engineering.

BOSTON ALUMNAE FUND.—This is a fund now amounting to over $550, available for women of high scholastic standing who have completed at least two years of college work. Loans shall in no case exceed $200.

MAINE CAMPUS FUND.—This fund, the gift of the Maine *Campus*, amounting to $450, is loaned to juniors and seniors whose conduct and scholarship are satisfactory, preference being given to those interested in the literary activities of the University. Amount loaned is limited to $50 per person. Loans must have the endorsement of a satisfactory second party.

CLASS OF 1926 LOAN FUND FOR SENIORS.—This fund, the gift of the Class of 1926, amounting to over $1200, is loaned to seniors of good scholastic standing during the last semester of their senior year. Amount loaned is $50 per person, exceptional cases to be allowed $100.

CARLETON ORCHARD FUND.—This fund originated in the gift to the State of Maine by James A. Gregory of one interest-bearing first mortgage bond for $1000, the interest on which was to be used for the promotion of scientific orcharding in Maine. At first administered by the Maine Department of Agriculture, the income from this bond was transferred in 1925 to the College of Agriculture of the University "for the assistance of needy students who shall be residents of the State of Maine, majoring in horticulture at the said college of agriculture."

MARY S. SNOW MEMORIAL FUND.—Students and friends of Mary S. Snow, one-time superintendent of schools in Bangor, and later a leader in home economics education, have established as a tribute to her memory a loan fund to be used in helping earnest and deserving young women secure a home economics education at the University of Maine. The fund at present amounts to over $4250. Loans may be granted to young women of such character and scholarship as give promise that the education thus made possible will be of genuine value to the students and to society.

WOMEN'S LOAN FUND.—This fund was inaugurated by the American Association of University Women, University of Maine Branch, in 1925. It provides for loans to undergraduate women of the University who have successfully completed one or more years of university work, and have been found by the University to be thoroughly satisfactory in regard to character, schol-

arship, and general ability, and to be in genuine need. The fund amounts at present to $1900; and loans to one student shall not exceed $200 a year.

Drummond Fund.—This fund of $1000 was established in memory of Frank Hayden Drummond, of Bangor, by his widow and children. It is loaned to needy students of good character who have attained an average of "C" or its equivalent.

American Pulp and Paper Mill Superintendents' Association Fund.—This fund amounts to $2500. The income is to be used to improve instruction and aid investigations in pulp and paper chemistry and technology, to develop coöperation between pulp and paper mill superintendents and young technical graduates, or to be loaned to meritorious students pursuing the pulp and paper course. A report is to be made annually to the Association.

General Loan Fund.—This fund, now amounting to $2900, was donated by unknown friends, students, and faculty of the University. The first donation was made in May, 1930, and has been increased at various periods since that time.

The Bangor Business and Professional Women's Loan Fund.—This fund, now amounting to $960, was established by the Business and Professional Women's Club of Bangor, Maine, for needy and deserving women students, preferably from Bangor and vicinity, who have been in attendance at least two years and who have maintained an average grade of "C" or better. Loans shall not exceed $250 per student.

Kappa Psi Loan Fund.—This fund, amounting to $225, was donated by the Kappa Psi Sorority during the spring of 1933, to be used for the benefit of women students.

Esther Ayres Chapter, Daughters of American Revolution Loan Fund.—This fund, amounting to $200, is a gift of the Orono Chapter of the D.A.R. and is to be loaned to women students who are juniors or seniors.

Charles M. Payson Loan Fund.—This fund, amounting to $5000, was given by Mrs. Charles M. Payson, of Portland, Maine, in memory of her late husband. It is to be loaned to needy students under such conditions as may be established by the University administration.

The Bertha Joy Thompson Loan Fund, amounting to $10,000, was bequeathed, in trust, to the University of Maine by the late Mrs. Bertha Joy Thompson, of Ellsworth, Maine. The net income from the fund is to be used as a "Loan Fund" to be loaned to worthy, deserving, and needy students of the University of Maine under such terms and conditions as the Board of Trustees may determine.

Delta Chi Alpha Loan Fund.—This fund, the gift of the Delta Chi Alpha Fraternity, amounting to $670, is available for loan to a male member of the senior class whose average college grade has been equivalent to "C" or better. The amount loaned each year is limited to $50.

SCHOLARSHIPS AND PRIZES

Forms for making application for scholarships may be obtained from the Chairman of the Faculty Committee on Honors or from the Registrar's Office, and should be returned to the Chairman before March 1. Candidates may, if they wish, apply for particular scholarships. No student whose record is unsatisfactory will be considered eligible for any scholarship award. Unless otherwise indicated, all awards are made by the Committee on Honors, subject to the approval of the President.

Scholarships available for graduate students are described in the section of the Catalog dealing with graduate study.

The Merritt Caldwell Fernald Scholarship, $150, established by the Trustees in 1923 and named in honor of the first acting President of the University, is awarded to the junior student having the highest scholarship rank in the University.

The James Stacy Stevens Scholarship, $150, established by the Trustees and named in honor of the first Dean of the College of Arts and Sciences, is awarded to the highest ranking student, resident of Maine, in the junior class in that college, the winner of the Fernald Scholarship being excepted.

The Harold Sherburne Boardman Scholarship, $150, in Technology, in honor of the first Dean of the College of Technology and the President of the University from 1926 to 1934, is awarded on the same terms as the foregoing.

The Leon Stephen Merrill Scholarship, $150, in Agriculture, in honor of the Dean of the College of Agriculture from 1911 to 1933, is awarded as are the foregoing.

The Charles Davidson Scholarship, $150, in the School of Education, in honor of the first professor of education in the University, is awarded as are the foregoing.

The University Scholarships, fifteen, of $150 each, established by the Trustees in 1935, are awarded annually to students of high scholastic standing and intellectual promise whose general record is also satisfactory and who are in need of financial assistance. Preference is given to students residing in the State of Maine.

The Secondary School Contest Scholarships, eight, of $150 each, established by the Trustees in 1931, are awarded annually to the eight entering freshmen who as secondary-school seniors have made the highest average rank in the State Senior Scholarship Contest sponsored by the School of Education, except that only one award may be given to any school. The highest ranking student of the eight selected is awarded a tuition scholarship for four years, the second highest for three years, the third for two years, and the five next in order for one year each. Each scholarship is awarded for

The New York Alumni Association Scholarships, two, of $50 each, are annually offered by the New York Alumni Association for the encouragement of proficiency in written and oral expression.

Scholarship No. 1, established in 1905, is offered for excellence in debating by the faculty Committee on Honors, on recommendation of the Department of Public Speaking. In case the effort in debating does not justify the award in any year or years, the amount shall be accumulative.

Scholarship No. 2 is offered annually to an upperclassman in the College of Technology to encourage advancement and proficiency in English as equipment for later professional and civil life. The award, made by a committee of judges selected by the College of Technology and the Department of English, is based chiefly upon a competition in writing held in April, open to juniors and seniors who have satisfactorily completed Freshman English and a further elective course in English Literature, and have taken or are taking English 5 (6). Consideration is also given to the showing and advancement indicated by the student's grades in his courses in English.

The Kidder Scholarship, $30, endowed in 1890 by Frank E. Kidder, Ph.D., of Denver, Colorado, a graduate of the University in the Class of 1879, is awarded by the Committee on Honors, with the approval of the President, to a student whose rank excels in his junior year.

The Chicago Alumni Association Scholarship, $50, established in 1903, is awarded annually to a sophomore pursuing a regular curriculum whose deportment is satisfactory and who has attained the highest rank in his class during the freshman year.

The Pittsburgh Alumni Association Scholarship, $30, established in 1905, is awarded annually to a member of the junior class in the College of Technology whose ability and needs justify the award. The selection is made by the President and the Dean and professors of the College of Technology.

The Joseph Rider Farrington Scholarship, the income from a one-thousand dollar bond, a gift of Arthur M., Edward H., Oliver C., Horace P., and Wallace R. Farrington, all graduates of the University of Maine and sons of Mr. and Mrs. Joseph Rider Farrington, is offered annually in honor of their parents, in the following order of preference: (a) Any direct descendant of Joseph Rider and Ellen Holyoke Farrington, or anyone whom three of such descendants may select; (b) Any student bearing the surname of Farington or Holyoke; (c) A high-ranking student in the College of Agriculture of good character and personality who, in the judgment of the Faculty Committee on Honors, is most deserving of the award.

The Stanley Plummer Scholarship, the income of one thousand dollars, the bequest of Colonel Stanley Plummer, of Dexter, Maine, is awarded

annually to a needy and deserving student selected by the Committee on Honors. Students born in Dexter, Maine, shall have preference.

The Penobscot County Alumni Association Scholarships, two, of $50 each, first given in 1920, are awarded by the President, the executive secretary of the General Alumni Association, and the Committee on Honors to two male students whose homes are in Penobscot County, who are found to be needy and deserving, and whose scholarship and conduct are satisfactory.

The Elizabeth Abbott Balentine Scholarship, $75, endowed by the Gamma Chapter of Alpha Omicron Pi, is awarded by the Committee on Honors to a woman member of the sophomore class, on recommendation of the Chapter with the approval of the President, on a basis of scholarship and individual need.

The Class of 1905 Scholarship, the income from a one-thousand dollar bond, donated by members of the Class of 1905, is awarded to a man of the freshman class pursuing a regular curriculum, whose deportment is satisfactory, and who attains the highest rank in the mid-year examinations.

The Carrol C. Jones Scholarship, the net income of a fund of $1000 bequeathed by Minnie E. Jones, of Solon, in memory of her son, Carrol C. Jones, of the Class of 1914, is awarded annually to the student who makes the greatest improvement in his college work during his or her freshman year.

The Ohio Alumni Association Scholarship, $50, established in 1934 by the Ohio Alumni Association, is awarded annually to a student whose character, scholarship, and need justify the award.

The Boston Alumni Association Scholarships, two, of $75 each, established in 1935, are awarded annually to any deserving student at the University, with preference given to male upperclassmen from Eastern Massachusetts.

The Lincoln County Alumni Association Scholarship, $50, established in 1935, is awarded annually to an upperclassman whose home is in Lincoln County, on a basis of satisfactory academic record and conduct, qualities of leadership, and financial need.

The Northern Aroostook Alumni Association Scholarship, $50, established in 1935, is awarded annually to an upperclass student on a basis of satisfactory scholastic record and conduct, financial need, and qualities of leadership.

The Philadelphia Alumni Association Scholarship, $50, established in 1935, is awarded annually to some needy and deserving student, with preference given to the vicinity of Philadelphia.

The Rhode Island Alumni Association Scholarship, $50, established in 1935, is awarded to a male student from Rhode Island or that portion of Massachusetts represented by the Association, whose personal and scholastic record is satisfactory and who has been prominent in extra-curricular activities.

The Southern California Alumni Association Scholarship, $50, established in 1935, is awarded annually to some upperclass student whose scholastic record and conduct are satisfactory, who possesses qualities of leadership, and who is in need of financial aid.

The Southern New Hampshire Alumni Association Scholarship, $75, established in 1935, is awarded to some needy and deserving student, with preference given to the locality represented by the Association.

The Waldo County Alumni Association Scholarship, $50, established in 1935, is awarded in the spring semester to a student from Waldo County, preferably a freshman, whose character and scholarship standing are high, and who needs financial assistance to continue in college. The award is made by the Committee on Honors, subject to the approval of the Executive Committee of the Association.

The Worcester County Alumni Association Scholarship, $50, established in 1935, is awarded annually to a worthy student from Worcester County, preferably an entering freshman.

The York County Alumni Association Scholarship, $50, established in 1935, is awarded to an upperclassman from York County whose scholastic record and conduct are satisfactory, who possesses qualities of leadership, and who needs and merits financial aid.

The Western Massachusetts Alumni Association Scholarship, $50, established in 1935, is awarded to a needy and deserving student from Western Massachusetts.

The Connecticut Alumni Association Scholarship, $50, established in 1935, is awarded annually to a needy and deserving student, with preference given to students from Connecticut.

The Knox County Alumni Association Scholarship, $75, established in 1936, is awarded annually to a student from Knox County whose record and conduct have been satisfactory and who needs and merits help.

The Somerset County Alumni Association Scholarship, $50, established in 1936, is awarded annually to a needy and deserving senior or junior student from Somerset County.

The Piscataquis County Alumni Association Scholarship, $50, established in 1937, is awarded annually to an upperclass student whose home is in Piscataquis County, who has made a satisfactory record and who needs and merits financial assistance.

The Southern Kennebec Alumni Association Scholarship, $50, established in 1937, is awarded annually to a needy and deserving student whose home is within the area of the Association. Preference is to be given to juniors and seniors.

The John M. Oak Scholarship, the income of a fund of $1500, established in 1935 by the estate of Mr. Oak, a graduate of the Class of 1873 and

a Trustee of the University from 1908 to 1915, for the advancement of the art of public speaking in the University, is awarded annually to that upperclass student who shall have delivered the best speech of the persuasive type in a contest held for that purpose.

The Class of 1911 Scholarship, the income of a fund of $1000 donated to the University of Maine Foundation in 1936, is awarded annually to an upperclass student of good character and satisfactory conduct and rank, who possesses qualities of leadership and who needs and merits financial aid. Special consideration is given in the award to sons and daughters of members of the Class of 1911.

The Agricultural Club Scholarship, $50, is awarded annually to that male member of the junior class who, in addition to having been active in the Agricultural Club, has maintained a creditable academic record and needs and merits financial aid. Award is made by a committee comprising the Dean of the College of Agriculture as chairman, the Director of Short Courses in the College of Agriculture, and the Accountant of the University.

The Maine Farm Bureau Fund Scholarship, $75, is awarded annually to a junior or senior student, resident of Maine, in the College of Agriculture, on a basis of character, scholarship, financial need, and qualities of leadership. The Dean of the College of Agriculture, the Secretary of the Farm Bureau Federation, and the Accountant of the University constitute the committee on award.

The Class of 1909 Fund.—The income of a fund of $1000 presented to the University of Maine Foundation by the members of the Class of 1909 at their twenty-fifth reunion is to be used for such purposes as the directors of the Foundation may determine.

The Chi Omega Sociology Prize, $25, is offered annually by the Chi Omega Sorority, in accordance with its national policy, to the woman student in the sophomore or junior class who secures the highest grade in the beginners' course in sociology. Her general deportment and interest in the study of sociology may also be considered in determining the award.

The Prize of the Class of 1873, the income of $1000, the gift of Russell W. Eaton, of Brunswick, a member of the Class of 1873, is awarded annually to that member of the sophomore class who is able to show the greatest improvement in mechanical drawing during the first two years of his college course. It is expected that candidates for this prize shall have had no training in mechanical drawing previous to entering the University.

The Alpha Omicron Pi Alumnae Prize, $10, given by the Bangor Alumnae Chapter of Alpha Omicron Pi, is awarded annually to the woman student showing the greatest improvement in her work during her freshman year. The record at the Registrar's office, showing the comparison of grades of the fall semester with those of the spring semester, shall furnish the basis of award.

The Sigma Mu Sigma Award, $25, is given annually by the honorary society Sigma Mu Sigma to a member of the current sophomore or junior class who shall have completed at least a semester and a half of the introductory course in General Psychology, on a basis of proficiency, interest, and general promise in the subject. Nominations for the award are made to the president of the society by the instructors in the course about the middle of the spring semester, and it becomes available upon the student's return to the University in the following semester.

The Pale Blue Key Award, $50, is given each year by the Pale Blue Key to some member of the freshman class who needs help, has shown promise in track athletics in his freshman year, and has maintained a satisfactory scholarship standing. The award is made by a committee comprising the president of the Pale Blue Key, the coach of track athletics, and a member of the faculty to be chosen by the club, subject to the approval of the President. The winner will be given the award upon his return to the University in his sophomore year. Applications must be made in writing and sent to either the coach of track athletics or the president of the Pale Blue Key before May 1.

The Henry L. Griffin Prize in English Composition, $10, in honor of the late Rev. Henry L. Griffin, of Bangor, is awarded by the Department of English for excellence in the freshman course in composition. The chief basis of the award is a competition in writing held during the month of April.

The Franklin Danforth Prize, $15, the gift of the Hon. Edward F. Danforth, of Skowhegan, a graduate of the University of the Class of 1877, in memory of his father, Franklin Danforth, is awarded to that member of the senior class in the College of Agriculture who attains the highest standing throughout his curriculum.

The Greek Culture Prize, $15, the gift of the Hon. Edward F. Danforth, of Skowhegan, a graduate of the University in the Class of 1877, is awarded annually to that senior who shall have given evidence of the best appreciation of the spirit of Greek culture. The award is made on recommendation of the Professor of Ancient Civilization.

The Spanish Club Prize, $10, is awarded annually by the Círculo Español for excellence in Elementary Spanish to a freshman student, on the basis of a competitive examination.

The Robert C. Hamlet Prize, $25, established in 1935, in accordance with the will of Mr. Hamlet, a graduate of the University in the Class of 1925, is awarded annually to that student in the University who shall have written the best original one-act play during the year of award. The judges are the Dean of the College of Arts and Sciences, the head of the Department of English, and the president of the Maine Masque.

The Claude Dewing Graton Prize, the income from four shares of stock donated by Mr. Graton, of the Class of 1900, is awarded annually to a regularly enrolled undergraduate student under 25 years of age who shall have written the best essay on some current constitutional question. Entry for competition should be made with the Professor of Government before January 1.

The Mary Ellen Chase Prize, $100, given by Dr. Mary Ellen Chase, a graduate of the University in the Class of 1909, is awarded at Commencement to that student in the University who shall have submitted the best piece of original prose dealing with some aspect of the State of Maine. The award is made by a committee of judges selected by the head of the Department of English.

The Alpha Zeta Senior Award, $15, is given annually by the honorary fraternity Alpha Zeta to a high ranking senior member whose college career has been marked by useful service in campus activities.

The Class of 1908 Commencement Cup, donated by the Class of 1908 alumni, is awarded to that graduate class, the largest percentage of whose members register during Commencement Week.

The Twentieth Century Cup, given by the New York Alumni Association, is awarded annually at Commencement to that graduate class in the Twentieth Century group, the largest percentage of whose members register before six o'clock on Alumni Day.

The Fraternity Scholarship Cup, presented by the 1910 Senior Skulls Society, was awarded in turn at each Commencement to that fraternity having the highest standard in scholarship for the preceding calendar year. The cup was to become the permanent property of the fraternity to which it should be awarded the greatest number of times through an eleven-year period. The award was renewed in 1921 for an eleven-year period by the 1921 Skulls, and in 1932 by the 1932 Skulls. The first cup was awarded in 1921 to Phi Eta Kappa and the second in 1932 to Lambda Chi Alpha.

The Freshman Scholarship Cup is awarded by the University each spring to that secondary school in Maine having three or more of its graduates in full standing in the freshman class, whose freshman representatives as a group shall have attained the highest scholastic standing for the fall semester preceding. The award was made first in 1931, to Fort Kent High School, in 1932 to Boothbay Harbor High School, in 1933 to Deering High School, in 1934 to South Portland High School, in 1935 to Deering High School, and in 1936 to Brewer High School.

The Washington Alumni Association Watch is presented annually by the Alumni Association of Washington, D. C., to the male member of the

graduating class who, in the opinion of the students and the University administration, has done the most for the University during his curriculum. This award is made as the result of a secret ballot by the students, passed upon by the President and the Administrative Committee.

The Portland Alumnae Association Watch is presented annually by the Portland Club of University of Maine Women to the woman member of the graduating class who, in the opinion of the students and the University administration, has done the most for the University during her curriculum. This award is made as the result of a secret ballot by the students, passed upon by the President and the Administrative Committee.

The Agricultural Club Membership Cup, furnished by the Agricultural Club, is engraved each year with the numerals of that undergraduate class which can show the best record of membership in the club.

The Charles Rice Cup was presented in 1921 by the Kappa Sigma Fraternity in honor of Charles Anthony Rice, of the Class of 1917, who was killed in service, to be held for one year by the team winning the Intramural Track Championship.

The Intramural Plaques are presented each year by the Intramural Athletic Association to the fraternity making the best showing in each major intramural sport, and a special plaque is given to that fraternity which makes the best performance in all the sports.

DEGREES

The degree of Bachelor of Arts (B.A.), with specification of the major subject, is conferred upon all students who complete a curriculum in the College of Arts and Sciences.

The degree of Bachelor of Science (B.S.) in the curriculum pursued is conferred upon students who complete the work of four years in the Colleges of Agriculture or Technology according to the requirements prescribed by those Colleges and the University.

The degree of Bachelor of Arts in Education (B.A. in Ed.), Bachelor of Science in Education (B.S. in Ed.), or Bachelor of Science in Commercial Education (B.S. in C.Ed.) is conferred upon students who complete the prescribed work in the School of Education.

A minimum residence of one year is required for the attainment of any bachelor's degree. This regulation refers to the senior year. No student will be recommended for a degree who, having been reported to the Committee on Student's Use of English of his college, shall have failed to satisfy the requirements of the committee.

The degrees of Master of Arts (M.A.), Master of Science (M.S.), Mas-

ter of Arts in Education (M.A. in Ed.), and Master of Science in Education (M.S. in Ed.) are granted for one year's graduate work completed with distinction.

Degrees with Distinction and with Honors

Degrees with distinction are conferred at Commencement for the following attainments in rank:

Seniors in the Colleges of Agriculture and Technology having an average grade of 3.50 or above are graduated with highest distinction, 3.25 to 3.49 with high distinction, and 3.00 to 3.24 with distinction.

Seniors in the College of Arts and Sciences and the School of Education having an average grade of 3.75 or above are graduated with highest distinction, 3.50 to 3.74 with high distinction, and 3.25 to 3.49 with distinction.

The average grade is based on the work of the first three and one-half years, which must include three years of resident study at the University of Maine for students in the Colleges of Agriculture, Arts and Sciences, and Technology and two years in the School of Education for students who have transferred from other institutions. Candidates in the Colleges of Agriculture, Arts and Sciences, and Technology must have completed seven-eighths and in the School of Education three-fourths of the required hours at the end of the fall semester of the senior year. Candidates must take their senior year at the University of Maine.

Seniors in the College of Arts and Sciences who complete satisfactorily the Honors program are graduated with Honors, with High Honors, or with Highest Honors.

STUDENT REGULATIONS

It is assumed that all students entering the University are willing to subscribe to the following: *A student is expected to show, both within and without the University, respect for order, morality, and the rights of others, and such sense of personal honor as is demanded of good citizens.*

The quota of regular studies for each student varies from a minimum of fourteen hours to a maximum of seventeen hours in the College of Arts and Sciences, from a minimum of fourteen hours to a maximum of eighteen hours in the School of Education, and from a minimum of seventeen hours to a maximum of twenty-two hours in the College of Technology and the College of Agriculture except that in the Department of Home Economics the limits are fourteen hours and nineteen hours. In the application of this rule, two or three hours of laboratory work count as one hour.

Each student is expected to be present at every college exercise for which he is registered.

Detailed information about the regulations affecting students is contained in a pamphlet which may be obtained at the office of the Registrar.

Use of Automobiles by Freshmen

Freshmen are not allowed to bring automobiles or motorcycles upon the campus except those who use them to commute daily from their homes.

Organization of the University

The University is divided for purposes of administration by the Trustees into two divisions, the academic and the financial. The former is divided into the Colleges of Agriculture, Arts and Sciences, and Technology, the School of Education, and the Maine Agricultural Experiment Station. To the College of Agriculture belongs the Agricultural Extension Service. The policies of the University as a unit are determined by the Board of Trustees, the administrative officers, and the general faculty, but each division regulates those affairs which concern itself alone. In addition to the faculties of the colleges there are the Faculty of Graduate Study and the Faculty of the Summer Session.

College of Agriculture

Curricula in Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Bacteriology, Biological and Agricultural Chemistry, Botany, Dairy Husbandry, Dairy Technology, Entomology, Forestry, Home Economics, Horticulture, Poultry Husbandry, and Wildlife Conservation.

Two-Year Course in Agriculture.

Short Courses in Agriculture.

Farm and Home Week.

Extension Lecture Courses.

College of Arts and Sciences

Major subjects are pursued as integrated fields of study based upon special interests. These may coincide with departmental lines (e.g., Chemistry, Classics, Economics and Sociology, English, German, History and Government, Mathematics and Astronomy, Philosophy, Physics, Psychology, Public Speaking, Romance Languages, and Zoology), or they may embody special curricula of a cultural or pre-professional character (e.g., business, comparative literature, creative writing, dramatics, journalism, law, library work, medicine, politics, and social work).

School of Education

Professional training is offered for secondary-school teachers and prospective principals and supervisors in the public schools, and to a limited extent in elementary education. A curriculum is also offered for the training of commercial teachers who have already received their preliminary training in commercial schools. The degrees Bachelor of Arts in Education, Bachelor of Science in Education, and Bachelor of Science in Commercial Education are offered.

College of Technology

Curricula in Chemical Engineering, Chemistry, Civil Engineering, Electrical Engineering, General Engineering, Mechanical Engineering, and Pulp and Paper Technology.

Faculty of Graduate Study

Courses leading to the degrees of Master of Arts, Master of Science, Master of Arts in Education, and Master of Science in Education have been organized in a considerable number of departments. The professional degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, and Mechanical Engineer are granted upon completion of the appropriate curricula.

Maine Agricultural Experiment Station

Offices and principal laboratories at Orono; Highmoor Farm at Monmouth; Aroostook Farm at Presque Isle.

Summer Session

A session of six weeks is maintained for teachers and college students. Work is offered at present in eighteen departments.

College of Agriculture

GENERAL INFORMATION

The College of Agriculture comprises the Departments of Agricultural Economics and Farm Management, Agricultural Education, Agronomy, Animal Industry, Bacteriology and Biochemistry, Botany and Entomology, Forestry, Home Economics, Horticulture, Short Courses, and Extension Service. This college offers to young men and women an opportunity to secure a broad education and thorough training in the sciences and technics relating to the major course of study they may elect to pursue. It aims to prepare them for lives of usefulness as citizens of the State and for effective service in their chosen vocations or professions.

More specific and detailed information concerning the purposes of each major course of study offered by the College will be found in the description of the various curricula.

The four-year curricula in the College of Agriculture require the completion of 147 credit hours, with the exception of those of Forestry and Home Economics, which comprise 153 and 128 hours respectively. In addition each student must accumulate a total of grade points equal to the number of hours required for graduation in the curriculum chosen. These grade points are computed by multiplying each hour of the letter grade by a factor as follows: A by 3, B by 2, C by 1, and D by 0. Upon the completion of the required curriculum, with the necessary number of grade points, the student will be recommended for the degree of Bachelor of Science (B.S.)

On entering either a four-year curriculum in Agriculture or the Two-Year Agricultural Course, a student is required to fill out a practical experience blank. Those who have not had experience in general farming are required to work during at least one summer vacation on some farm approved by the faculty of the college. Before receiving their degrees or certificates candidates must satisfy the faculty that they are familiar with the methods of conducting operations incident to general farming. This does not apply to students majoring in Botany and Entomology, Bacteriology, Biochemistry, Forestry, Wildlife Conservation, or Home Economics.

Physical training is required in each semester of the first two years. No credit toward a degree is allowed for this work. Physical training is not required in the two-year agricultural curriculum.

Students in agriculture who contemplate entering experiment station

chemical work should elect the courses offered in Biochemistry covering the qualitative and quantitative chemical analysis of feeds, fertilizers, and dairy products. They should also elect a preparatory course in quantitative chemical analysis.

Students desiring to specialize in the botanical or entomological aspects of Forestry may offer freshman and sophomore years in Forestry as equivalent to the first two years' work in Agriculture and register in the curriculum in Botany and Entomology during the junior or senior years.

A star (*) before the time designated for a course indicates that three or sometimes more hours of actual work are required to obtain a credit of one hour; a dagger (†) indicates that two hours of actual work are required to obtain a credit of one hour.

REGULAR CURRICULA AND COURSES OF INSTRUCTION

The courses of instruction are organized as follows:

1. Four-Year Major Agricultural Curricula:
   Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Bacteriology, Biochemistry, Botany, and Entomology, Dairy Husbandry, Dairy Technology, Horticulture, and Poultry Husbandry.
2. Four-Year Forestry Curricula:
   Forestry, Wildlife Conservation
3. Four-Year Home Economics Curricula:
   Vocational Sequences
   1. Home Economics Education
   2. Extension-Home Demonstration or 4-H Club Work
   3. Foods and Nutrition
   4. Textiles and Clothing
   5. Development and Training
   6. Special Sequences: Home Economics Journalism, Household Equipment, Social Service, and others formulated to fit individual cases
4. The Two-Year Course in Agriculture
5. Short Courses in Agriculture
6. Farm and Home Week
7. Extension Lecture Courses

THE FOUR-YEAR AGRICULTURAL CURRICULA

The four-year agricultural curricula are designed for those who wish to engage in the business of farming; for those contemplating the special fields of agricultural economics and farm management, agronomy and agricultural engineering, animal husbandry, bacteriology, biological and agricultural chemistry, botany and entomology, dairy husbandry, dairy technology, horticulture, and poultry husbandry; for those desiring to enter Federal or State agricultural research work; for those planning to prepare themselves for the teaching of agriculture and the allied sciences in secondary schools and colleges; and for those seeking to fit themselves to become agricultural extension agents or specialists in any of the various phases of agriculture. In addition to the specific fields mentioned above there are many other opportunities open to the college trained man in the agricultural and associated industries.

Certain studies are fundamental to all work in agricultural lines, and for this reason as many of these subjects as possible are offered in the first year, during which the student is necessarily given no choice of subjects. Beginning with the sophomore year each student should start specialization in one of the following major curricula: Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Bacteriology, Biochemistry, Botany and Entomology, Dairy Husbandry, Dairy Technology, Horticulture, or Poultry Husbandry; and at the beginning of the junior year he must establish a definite major course of study to be followed until the requirements for graduation shall have been satisfied.

It should be noted that each major curriculum allows a student a number of elective hours. The elective subjects are selected with the advice of the major instructor. In view of the fact that the economic aspects of the agricultural industry have become so vitally important, it is suggested that the student elect subjects in the field of agricultural economics in addition to those which may be required in his major curriculum; particularly is it suggested that he obtain as much information as he possibly can on the marketing of agricultural products. In the case of those students majoring in Agricultural Economics opportunity is offered in the way of elective hours to obtain training in such of the agricultural production subjects as may be desired to furnish a basic production background.

Honor Course in Agriculture

Any student who has obtained an average grade of at least 3.25 in the courses offered by his major department during the first three years of his college course may register for honor courses in his major department or in

an allied department during his senior year, providing his average grade in such allied department is at least 3.25 in all subjects taken in that department. Such courses may be substituted for any elective course, the total number of credit hours not to exceed four. Such honor courses shall be designed especially to promote initiative and organizing ability in the student. The scope of such courses shall constitute a broad survey in the field selected for study and shall in no way be substituted for a thesis. The general plan shall be worked out by the head of the department in which the course is taken, and must be approved by the head of the student's major department.

Curriculum for the Freshman Year for All Students Taking Four-Year Curricula in Agriculture

Fall Semester				*Spring Semester*			
No.		Subject	Cr. Hours	No.		Subject	Cr. Hours
Ag	11	Field Crops, 2 †2	3	An	2	General Animal Husbandry, 2 †2	3
Ch	1a	General Chemistry, 2 †4	4	Bt	2	General Botany, 2 †4	4
Eh	1	Composition	3	Ch	2a	General Chemistry, 2 †4	4
Mt	1a	Military, †3	1½	Eh	2	Composition	3
Ph	1	General Poultry Husbandry, 2 †2	3	Ht	2	General Horticulture, 2 †2	3
Zo	1	General Zoology, 2 †4	4	Mt	2a	Military, †3	1½
Pt	1	Physical Education, 2	0	Pt	2	Physical Education, 2	0
			18½				18½

Curriculum for Students Specializing in Agricultural Economics and Farm Management

The curriculum in Agricultural Economics and Farm Management is planned to give the student a broad, comprehensive training in the economic principles of the production and marketing of agricultural products. The training in crops and livestock production, provided in this curriculum, is essential for a clear and proper understanding of the application of the principles of agricultural economics. The student may choose from the elective hours a sufficient amount of work in another department to prepare himself for a position in Agricultural Economics and Farm Management dealing with a particular group of agricultural products. The student upon completing

this curriculum of study may engage in some phase of one of the main divisions in the field, such as agricultural economics, farm management, agricultural marketing including coöperative marketing, agricultural statistics, or agricultural finance. Any one of these divisions offers many opportunities to the graduate.

SOPHOMORE YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 1	Soils, 2 *3	3	*Ag 14	Sweet Corn, Beans, and Peas, 1 †2	2
An 3	Care, Feed, Mgt. of Live Stock, 3 †2	4	*Ag 16	Forage and Pasture Crops, 1 †2	
Bt 45	General Genetics	3	Bc 8	Agricultural Chemistry	2
Dh 1	General Dairying, 2 †2	3	Fm 48	Agricultural Economics	3
Es 1a	Principles of Economics	3	Mt 4a	Military, †3	2
Mt 3a	Military, †3	2	Pt 4	Physical Education, 2	0
Pt 3	Physical Education, 2	0		Elective	10
		18			19

JUNIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
*Ag 15	Potato Production, 2 †2	3	Fm 52	Farm Accounting, 1 *6	3
By 3	Bacteriology	2	Fm 62	Agricultural Business Accounting, 2 *3	
Eh 5	Technical Composition	2	Fm 76	Agr. Marketing	3
Fm 73	Adv. Agr. Economics	2		Elective	12
Fm 75	Agricultural Statistics, 2 *3	3			
	Elective	10 or 7			
		19			18

* Only one course required (Ag 14, 15 or 16).

SENIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Fm 77	Agricultural Finance	2	Fm 74	Farm Management,	3 *3 4
Fm 79	Cooperative Marketing	2	†	Marketing	2
Fm 87	Agricultural Prices	2		Elective	14 or 12
	Marketing	2			
	Elective	10			
		18			18

† Not required if taken in fall.

Curriculum for Students Specializing in Agricultural Education

In recent years there has developed an ever increasing demand for men to teach vocational agriculture in secondary schools. This has been brought about in part through Federal legislation which provides special aid to help finance vocational agricultural courses.

Agricultural college graduates who have not taken the special courses designed to fit men for the teaching of vocational agriculture are not permitted to teach agriculture in schools receiving Federal aid for vocational agriculture.

Students who wish to qualify for appointment as teachers of vocational agriculture may do so by taking either a major or a minor in Agricultural Education.

Those who major will follow the prescribed curriculum.

Those who minor must elect all of the courses listed under Agricultural Education. In addition, Ag 41, 42, 43, 44, should be elected.

SOPHOMORE YEAR

Fall Semester

No.	Subject	Cr. Hours
Ag 1	Soils, 2 *3	3
An 3	Care, Feed, Mgt. of Live Stock, 3 †2	4
Bc 1	Organic Chemistry, 2 †2	3
En 21	Gen'l Entomology, 2 †4	4
Py 1	General Psychology, 2 †2	3
Mt 3a	Military, †3	2
Pt 3	Physical Education, 2	0
		19

Spring Semester

No.	Subject	Cr. Hours
Bc 2	Biochemistry, 3 †4	5
Bc 8	Agricultural Chemistry	2
Fm 48	Agricultural Economics	3
Fy 20	Woodlot Forestry	2
Py 2	General Psychology, 2 †2	3
Mt 4a	Military, †3	2
Pt 4	Physical Education, 2	0
	Elective	2
		19

JUNIOR YEAR

No.	Subject	Cr. Hours
Ae 3	Special Methods in Teaching Agriculture	2
Ag 41	School Shop, †2	1
By 3	Bacteriology	2
Dh 1	General Dairying, 2 †2	3
Eh 5	Technical Composition	2
	Elective	8
		18

No.	Subject	Cr. Hours
Ae 2	Practice Teaching	2
Ae 6	Special Methods in Teaching Agriculture	2
Ag 6	Soils and Fertilizers	2
Ag 16	Forage and Pasture Crops, 1 †2	2
Ag 36	Farm Machinery and Power, 2 *3	3
Ag 42	School Shop, †2	1
Fm 76	Agricultural Marketing	3
	Elective	3
		18

SENIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ae 1	Practice Teaching	2	Ae 8	Teaching Farm Mechanics	2
Ae 5	Supervised Farm Practice	2	Ag 30	Agricultural Engineering, 2 *3	3
Ag 15	Potato Production, 2 †2	3	Ag 44	School Shop, †2	1
Ag 35	Drainage and Land Reclamation, 2 *3	3	Fm 52	Farm Accounting, 1 *6	3
Ag 43	School Shop, †2	1	Fm 74	Farm Management, 3 *3	4
Fm 73	Advanced Agr. Economics	3		Elective	5
	Elective	4			
		18			18

Curriculum for Students Specializing in Agronomy and Agricultural Engineering

Agronomy in a large sense is a study of the principles underlying modern methods of crop production, plant breeding, adaptation and care of the soil, the source and use of fertilizer materials, the management of the farm, and various phases of agricultural engineering. This curriculum provides a well-rounded training in these subjects, and presents opportunity also for elective studies in stock raising, fruit and vegetable growing, economics, botany, zoology, bacteriology, and kindred subjects.

The graduate having followed this curriculum will find numerous fields of activity open to him; the more common of which are farming for himself, farm management positions, agricultural extension work, experiment-station investigational work, agricultural teaching, and opportunities in the various fertilizer and agricultural-machinery industries.

SOPHOMORE YEAR

Fall Semester

No.	Subject	Cr. Hours
Ag 1	Soils, 2 *3	3
Ag 5	Soil Formation, Erosion and Conservation	3
An 3	Care, Feed, Mgt. of Live Stock, 3 †2	4
Bc 1	Organic Chemistry, 2 †2	3
En 21	Gen'l Entomology, 2 †4	4
Mt 3a	Military, †3	2
Pt 3	Physical Education, 2	0
		19

Spring Semester

No.	Subject	Cr. Hours
Ag 16	Forage and Pasture Crops, 1 †2	2
Bc 2	Biochemistry, 3 †4	5
Bc 8	Agricultural Chemistry	2
Fm 48	Agricultural Economics	3
Mt 4a	Military, †3	2
Pt 4	Physical Education, 2	0
	Elective	5
		19

JUNIOR YEAR

No.	Subject	Cr. Hours
Ag 15	Potato Production, 2 †2	3
Ag 81	Seminar	1
Bt 53	Plant Physiology, 2 †4	4
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Eh 5	Technical Composition	2
	Elective	3
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Ag 30	Agricultural Engineering, 2 *3	3
Ag 82	Seminar	1
Bt 30	Plant Ecology, 1 †2	2
Bt 56	Plant Pathology, 2 †4	4
Fm 76	Agricultural Marketing	3
	Elective	3
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 81	Seminar	1
Bt 45	General Genetics	3
By 55	Bacteriology (Soil), 1 †4	3
	Elective	11
		18

No.	Subject	Cr. Hours
Ag 82	Seminar	1
Fm 74	Farm Management, 3 *3	4
	Elective	13
		18

Curricula for Students Specializing in Animal Husbandry, Dairy Husbandry, Dairy Technology, or Poultry Husbandry

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.		Subject	Cr. Hours	No.		Subject	Cr. Hours
Ag	1	Soils, 2 *3	3	Ag	16	Forage and Pasture Crops, 1 †2	2
An	3	Care, Feed, Mgt. of Live Stock, 3 †2	4	Bc	2	Biochemistry, 3 †4	5
Bc	1	Organic Chemistry, 2 †2	3	Fm	48	Agricultural Economics	3
Dh	1	General Dairying, 2 †2	3	Mt	4a	Military, †3	2
En	21	Gen'l Entomology, 2 †4	4	Pt	4	Physical Education, 2	0
Mt	3a	Military, †3	2			Elective	7
Pt	3	Physical Education, 2	0				
			19				19

ANIMAL HUSBANDRY

The curriculum in Animal Husbandry is so arranged that the student receives a comprehensive training in animal breeding, feeding, and management, consideration being given to the four chief groups of farm animals, cattle, horses, swine, and sheep. Because of the importance of crops to the maintenance of farm animals, this curriculum embraces subjects relating to crop production and farm management. The student on completion of this curriculum may engage in the business of animal breeding, furthering the promotion of pure bred livestock utilization; he may enter special phases of animal industry, such as Federal extension, control and investigational lines; he may become the superintendent of an animal breeding establishment; he may engage in college or university teaching of animal husbandry; or he may enter into any one of the great allied industries of animal industry, such as the meat packing business or the commercial feed business. The training he has received has furnished him with the necessary fundamental equipment to enable him to succeed.

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
An 5	Anatomy of Domestic Animals, 2 †2	3
Bc 9	Animal Biochemistry	2
Bt 45	General Genetics	3
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Eh 5	Technical Composition	2
	Elective	3
		18

Spring Semester

No.	Subject	Cr. Hours
An 6	Physiology of Domestic Animals	3
An 42	Adv. Live Stock Judging and Mgt., †2	1
An 44	Adv. Live Stock Feeding	2
By 52	Bacteriology, 1 †4	3
	Elective	9
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 35	Drainage and Land Reclamation, 2 *3	3
An 7	Animal Hygiene	2
An 55	Animal Nutrition	2
An 63	Seminar	1
	Elective	10
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Ag 36	Farm Machinery and Power, 2 *3	3
An 8	Animal Pathology	2
An 60	Adv. Animal Breeding, 1 †2	2
An 64	Seminar	1
Fm 52	Farm Accounting, 1 *6	3
	Elective	5
		18

DAIRY HUSBANDRY AND DAIRY TECHNOLOGY

These curricula are more specialized than that for Animal Husbandry in that dairy production and dairy manufactures are dealt with more specifically. The student pursuing one or the other of these curricula prepares himself to follow the business of dairy farming from the standpoint of efficient dairy-cattle breeding and efficient milk production, or some other phase of the dairy industry, such as the market-milk business, butter manufacturing, cheese manufacturing, condensed and powdered milk industry, and ice-cream manufacturing, each of which is constantly adding to its personnel young men who have received training similar to that offered in the Dairy Husbandry and

Dairy Technology curricula. In addition to the foregoing there are many opportunities to follow special lines of endeavor, Federal, state, and commercial, all of which require specialized training in dairy production and dairy manufactures.

DAIRY HUSBANDRY

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
An 5	Anatomy of Domestic Animals, 2 †2	3
Bc 9	Animal Biochemistry	2
Bt 45	General Genetics	3
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Dh 5	Market Milk, 3 †2	4
Eh 5	Technical Composition	2
		19

Spring Semester

No.	Subject	Cr. Hours
An 6	Physiology of Domestic Animals	3
An 42	Adv. Live Stock Judging and Mgt., †2	1
An 44	Adv. Live Stock Feeding	2
By 52	Bacteriology, 1 †4	3
Dh 2	Butter Making, 1 †4	3
	Elective	5
		17

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 35	Drainage and Land Reclamation, 2 *3	3
An 7	Animal Hygiene	2
An 55	Animal Nutrition	2
An 63	Seminar	1
Dh 3	Cheese Making, 2 *6	4
	Elective	6
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Ag 36	Farm Machinery and Power, 2 *3	3
An 8	Animal Pathology	2
An 60	Adv. Animal Breeding, 1 †2	2
An 64	Seminar	1
By 54	Bacteriology (Dairy), 1 †4	3
Fm 52	Farm Accounting, 1 *6	3
	Elective	2
		18

DAIRY TECHNOLOGY

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Dh 5	Market Milk, 3 †2	4
Eh 5	Technical Composition	2
	Elective	7
		18

Spring Semester

No.	Subject	Cr. Hours
By 54	Bacteriology (Dairy), 1 †4	3
Dh 2	Butter Making, 1 †4	3
Dh 4	Condensed Milk, 2 *3	3
Dh 6	Dairy Products Judging, †2	1
Fm 76	Agricultural Marketing	3
	Elective	5
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Dh 3	Cheese Making, 2 *6	4
Dh 51	Dairy Technology	2
Dh 55	Dairy Refrigeration	2
Dh 61	Dairy Tech. Seminar	1
Dh 63	Adv. Dairy Products Testing, †2	1
Fm 85	Marketing Dairy Products, 2 †2	3
	Elective	5
		18

No.	Subject	Cr. Hours
Dh 58	Ice Cream Making, 2 †4	4
Dh 62	Dairy Tech. Seminar	1
Dh 64	Adv. Dairy Products Control, †4	2
Dh 66	Dairy Machinery, †4	2
Fm 62	Agricultural Business Accounting, 2 *3	3
	Elective	6
		18

POULTRY HUSBANDRY

The poultry industry of the United States has come to be recognized as one of the highest-ranking agricultural industries and while it relies for its vastness on the widespread farm flock, nevertheless it offers abundant opportunities to men possessing special training in poultry breeding, feeding, and management. Commercial poultry raising calls for a specialized training in poultry husbandry and is becoming a business of large proportions. Many

openings also occur in poultry extension work, either Federal or state, and also in the poultry-supplies business. The curriculum in Poultry Husbandry furnishes the necessary training for the student contemplating entrance into the fast-growing poultry industry.

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
An 5	Anatomy of Domestic Animals, 2 †2	3
Bc 9	Animal Biochemistry	2
Bt 45	General Genetics	3
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Eh 5	Technical Composition	2
Ph 3	Exhibition and Production Judging, 1 †2	2
	Elective	1
		18

Spring Semester

No.	Subject	Cr. Hours
An 6	Physiology of Domestic Animals	3
By 52	Bacteriology, 1 †4	3
Fm 76	Agricultural Marketing	3
Ph 2	Poultry Breeding	2
	Elective	7
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 35	Drainage and Land Reclamation, 2 *3	3
Fm 89	Marketing Poultry Products	2
Ph 5	Poultry Feeding	2
Ph 7	Poultry Seminar	2
	Elective	9
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Fm 52	Farm Accounting, 1 *6	3
Ph 4	Incubation and Brooding, 2 †2	3
Ph 6	Poultry Farm Management, 1 †2	2
Ph 8	Poultry Diseases	2
	Elective	6
		18

Curriculum for Students Specializing in Bacteriology

This curriculum is designed primarily for those students who desire to fit themselves for laboratory technicians or for research in the field of general or applied bacteriology. Stress is placed not only upon the agricultural

phases of bacteriology, but also upon the sanitary and technical aspects. Students interested in bacteriology as applied to agriculture will take the regular freshman curriculum in Agriculture; others will be guided by the freshman curriculum as outlined below. Two years of German or its equivalent are required.

FRESHMAN YEAR

Fall Semester				*Spring Semester*			
No.	Subject	Cr. Hours		No.	Subject	Cr. Hours	
Ch 1a	General Chemistry, 2 †4	4		Ch 2a	General Chemistry, 2 †4	4	
Eh 1	Composition	3		Bt 2	General Botany, 2 †4	4	
Ms 1	Trigonometry	2		Eh 2	Composition	3	
Ms 3	College Algebra	2		Ms 4	Analytical Geometry	4	
Mt 1a	Military, †3	1½		Mt 2a	Military, †3	1½	
Zo 1	General Zoology, 2 †4	4		Pt 2	Physical Education, 2	0	
Pt 1	Physical Education, 2	0			Elective	2	
	Elective	2					
		18½				18½	

SOPHOMORE YEAR

Ag 1	Soils, 2 *3	3		Bc 2	Biochemistry, 3 †4	5	
Bc 1	Organic Chemistry, 2 †2	3		Ch 40	Quantitative Analysis, 1 †2, *6	4	
Ch 31	Qualitative Analysis, 2 †2, *6	5		Gm 20	German for Chemists	3	
Gm 19	German for Chemists	3		Mt 4a	Military, †3	2	
Mt 3a	Military, †3	2		Pt 4	Physical Education, 2	0	
Pt 3	Physical Education, 2	0			Elective	4	
	Elective	3					
		19				18	

JUNIOR YEAR

Fall Semester		*Spring Semester*	
Bc 51 Biochemistry	3	Bc 62 Advanced Biochemistry	3
Bt 53 Plant Physiology, 2 †4	4	Bc 64 Biochemical Laboratory Methods, †6	3
By 1 Bacteriology, †6	3	By 52 Bacteriology, 1 †4	3
By 3 Bacteriology	2	By 54 Bacteriology (Dairy), 1 †4	3
Ch 21 Introductory Theoretical Chemistry	2	Ch 22 Introductory Theoretical Chemistry	2
Dh 1 General Dairying, 2 †2 / or / Elective	3	Gm 22 German for Chemists	3
Gm 21 German for Chemists	3	Elective	2
	20		19

SENIOR YEAR

Bc 57 Biological Colloids	3	By 62 Seminar	1
By 55 Bacteriology (Soil), 1 †4	3	By 102 Problems in Bacteriology, †4 to †8	2 to 4
By 61 Seminar	1	Elective	12 to 14
By 101 Problems in Bacteriology, †4 to †8	2 to 4		
Elective	6 to 8		
	17		17

Curriculum for Students Specializing in Biochemistry

The curriculum in Biochemistry is designed to give the student an opportunity to specialize in chemistry of plant and animal life. With proper choice of electives under the direction of the major instructor students may also pursue special work in agricultural chemistry, particularly in chemistry of the soil and fertilizers.

FRESHMAN YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 11	Field Crops, 2 †2	3	An 2	General Animal Husbandry, 2 †2	3
Ch 1a	General Chemistry, 2 †4	4	Bt 2	General Botany, 2 †4	4
Eh 1	Composition	3	Ch 2a	General Chemistry, 2 †4	4
Mt 1a	Military, †3	1½	Eh 2	Composition	3
Ph 1	General Poultry Husbandry, 2 †2	3	Ht 2	General Horticulture, 2 †2	3
Zo 1	General Zoology, 2 †4	4	Mt 2a	Military, †3	1½
Pt 1	Physical Education, 2	0	Pt 2	Physical Education, 2	0
		18½			18½

SOPHOMORE YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 1	Soils, 2 *3	3	Bc 2	Biochemistry, 3 †4	5
Bc 1	Organic Chemistry, 2 †2	3	Ch 40	Quantitative Analysis, 1 †2, *6	4
Ch 31	Qualitative Analysis, 2 †2, *6	5	Gm 20	German for Chemists	3
Gm 19	German for Chemists	3	Mt 4a	Military, †3	2
Mt 3a	Military, †3	2	Pt 4	Physical Education, 2	0
Pt 3	Physical Education, 2	0		Elective	4
	Elective	3			
		19			18

JUNIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bc 9	Animal Biochemistry	2	Bc 62	Advanced Biochemistry	3
Bc 53	Agricultural Analysis, †6	3	Bc 64	Biochemical Laboratory Methods, †6	3
By 1	Bacteriology, †6	3	By 52	Bacteriology, 1 †4	3
By 3	Bacteriology	2	Ch 22	Introductory Theoretical Chemistry	2
Ch 21	Introductory Theoretical Chemistry	2	Gm 22	German for Chemists	3
Gm 21	German for Chemists	3		Elective	4
	Elective	4			
		19			18

SENIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bc 57	Biological Colloids	3	Bc 102	Research, †8	4
Bc 101	Research, †8	4		Elective	14
	Elective	11			
		18			18

Curricula for Students Specializing in Botany and Entomology

This curriculum is designed for those preparing themselves to engage in research or to enter the field of teaching in either the pure or applied science of botany or entomology. Students interested in botany and entomology as applied to agriculture or forestry may transfer from either the Agriculture or Forestry curriculum at the beginning of the sophomore year and from the Forestry curriculum at the beginning of the junior year. Others will be guided by the freshman curriculum outlined below. A reading knowledge of French or German is required.

FRESHMAN YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ch 1a	General Chemistry, 2 †4	4	Bt 2	General Botany, 2 †4	4
Eh 1	Composition	3	Ch 2a	General Chemistry, 2 †4	4
Md 1	Fund. of Drafting, †4	2	Eh 2	Composition	3
Ms 1	Trigonometry	2	Md 2	Elementary Machine Drafting, †4	2
Ms 3	Algebra	2			
Mt 1a	Military, †3	1½	Mt 2a	Military, †3	1½
Zo 3	Animal Biology, 2 †4	4	Zo 4	Animal Biology, 2 †4	4
Pt 1	Physical Education, 2	0	Pt 2	Physical Education, 2	0
		18½			18½

SOPHOMORE YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bc 1	Organic Chemistry, 2 †2	3	Bc 2	Biochemistry, 3 †4	5
Bt 33	Forest Botany, 2 †4	4	Gm 2	Elementary German	4
En 21	Gen'l Entomology, 2 †4	4	Mt 4a	Military, †3	2
Gm 1	Elementary German	4	Pb 2	Public Speaking	2
Mt 3a	Military, †3	2	Pt 4	Physical Education, 2	0
Pt 3	Physical Education, 2	0		Elective	5
	Elective	2			
		19			18

JUNIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bt 53	Plant Physiology, 2 †4	4	Bt 56	Plant Pathology, 2 †4	4
	or			or	
Zo 15	Comparative Anat. 2 †4		Zo 16	Comparative Anat., 2 †4	
Bt 57	Taxonomy of Vascular Plants, 2 †4	4	By 2	Bacteriology, †6	3
By 3	Bacteriology	2	Ce 14	Historical Geology	3
Eh 5	Technical Composition	2	Eh 10	Modern Literature	2
Gm 3	Short Story	3	Gm 4	Short Story	3
	Elective	4		Elective	3
		19			18

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
*Bt 35	Plant Anatomy, 2 †4	4	Bt 30	Plant Ecology, 1 †2	2
Bt 45	General Genetics	3	Bt 46	Genetics Laboratory, †4	2
Bt 59	General Mycology, 2 †4	4		Elective	13
Es 1a	Prin. of Economics	3			
	Elective	5			
		19			17

* Entomology students elect.

Curriculum for Students Specializing in Horticulture

The curriculum in Horticulture is intended, not only to provide a good preparation for engaging directly in fruit growing, vegetable gardening, ornamental horticulture, or other horticultural industry, but also to make possible to the graduate a reasonably easy entrance into several professional occupations which may require the additional preparation of a period of intensive graduate study. Prominent among the positions occupied by graduates in horticulture are those of investigators in experiment stations, teachers in colleges and secondary schools, extension agents, and state and Federal employees in the investigational, inspection, and regulatory services.

Although but a single curriculum in horticulture appears in the catalog, tending to place emphasis on a general training in horticulture, the student who wishes to specialize in one division of horticulture may do so by combining a careful selection of elective courses with the completion of one of the following groups as a requirement: (1) fruit culture—Horticulture 1, 9, 10, 53, 55, and Farm Management 74; (2) vegetable gardening—Horticulture 10, 21, 25, and Farm Management 74; (3) floriculture and ornamental horticulture—Engineering Drafting 1 or 9, Horticulture 3, 7, 8, and 15. Problems in Horticulture, Courses 11 and 12, afford still further opportunity for progressive specialization.

Conflicts may largely be avoided by scheduling elective courses in this sequence: sophomore year, Courses 1, 8, 9, and Engineering Drafting 9; sophomore or junior year, Course 4; junior year, Courses 3, 7, and 10; junior or senior year, Courses 53, 54, and 55; senior year, Courses 11, 12, 15, 21, 25, and Farm Management 74.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.	Subject	Cr. Hours		No.	Subject	Cr. Hours	
Ag 1	Soils, 2 *3	3		Bc 2	Biochemistry, 3 †4	5	
Bc 1	Organic Chemistry, 2 †2	3		Ag 6	Soils and Fertilizers	2	
En 21	Gen'l Entomology, 2 †4	4		Fm 48	Agricultural Economics	3	
Mt 3a	Military, †3	2		Mt 4a	Military, †3	2	
Pt 3	Physical Education, 2	0		Pt 4	Physical Education, 2	0	
	Elective	7			Elective	7	
		19				19	

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 35	Land Drainage and Reclamation, 2 *3	3	Bt 56	Plant Pathology, 2 †4	4
Bt 53	Plant Physiology, 2 †4	4	Ht 6	Landscape Gardening, 2* 3	3
By 3	Bacteriology	2	Ht 20	Vegetable Gardening, 2† 2	3
Eh 5	Technical Composition	2		Elective	9
	Horticulture	5			
	Elective	3			
		19			19

Ht 14 Summer Practice (elective) ..... 4 credit hours

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bt 45	General Genetics	3	Ht 52	Seminar	1
Ht 51	Seminar	1		Horticulture	4
	Horticulture	6		Elective	12
	Elective	7			
		17			17

CURRICULA IN FORESTRY

Two curricula are offered in the Forestry Department, both sequences leading to the degree of Bachelor of Science. Courses offered during the first year in either of these sequences are the same.

Curriculum for the Freshman Year for All Students Taking Four-Year Curricula in the Department of Forestry

Fall Semester				*Spring Semester*			
No.		Subject	Cr. Hours	No.		Subject	Cr. Hours
Ch	1a	General Chemistry, 2 †4	4	Bt	2	General Botany, 2 †4	4
Eh	1	Composition	3	Ch	2a	General Chemistry, 2 †4	4
Fy	1	Elements of Forestry	2	Eh	2	Composition	3
Md	1	Fund. of Drafting, †4	2	Fy	2	Elements of Forestry	2
Ms	9	Trigonometry and its Applications	2	Md	2a	Drafting, †4	2
Mt	1a	Military, †3	1½	Ms	10	Trigonometry and its Applications	2
Zo	1	General Zoology, 2 †4	4	Mt	2a	Military, †3	1½
Fy	47	Orientation, 1	0	Fy	48	Orientation, 1	0
Pt	1	Physical Education, 2	0	Pt	2	Physical Education, 2	0
			18½				18½

CURRICULUM IN FORESTRY

A four-year undergraduate curriculum in Forestry is offered. In addition four courses from this undergraduate curriculum are open to graduate credit to students majoring in other curricula. A limited number of graduate students will be accepted for graduate work upon completion of the four-year curriculum or its equivalent at another university. The Forestry curriculum follows. It is arranged to meet the requirements of the profession of forestry for forestry instruction in the United States. Completion of the curriculum leads to the degree of Bachelor of Science. It will enable the graduate to qualify for technical and administrative positions in the profession, and will admit to advanced standing in postgraduate schools of forestry if further and more advanced work is desired. It will also render a student eligible for the Civil Service examinations for the position of Junior Forester in the United States Forest Service, and other Federal bureaus employing foresters. Owing to the wide field covered by the curriculum, it offers an excellent basis for a broad and liberal education.

The first two years are devoted very largely to fundamental and pretechnical subjects which are basic for a proper understanding of the more highly specialized work in technical subjects during the last two years. Instruction in the Department consists of lectures, recitations, laboratory and field work, the latter consuming a considerable portion of the scheduled time.

A camp course of six weeks' practical experience is required of all men in the summer between the sophomore and junior years. This work is offered at a camp operated by the Department, where students are able to observe large forest areas under permanent management and large private manufacturing plants specializing in the utilization of various kinds of forest products. A second camp course of eight weeks' practical experience is required of all seniors at camps owned and operated by the Forestry Department and located on Indian Township, near Princeton, Maine.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.	Subject	Cr. Hours		No.	Subject	Cr. Hours	
Ag 5	Soil Formation and Conservation	3		Bt 34	Forest Botany, 1 *3	2	
Bt 33	Forest Botany, 2 †4	4		Eh 10	Modern Literature	2	
Ce 1	Plane Surveying	3		En 22	Forest Entomology, 2 †4	4	
Ce 3	Field Work and Plotting, *9	3		Es 2b	Principles of Economics	2	
Es 1b	Principles of Economics	2		Fy 4	Administration and Protection	4	
Fy 3	Logging	2		Fy 14	Forest Products	2	
Mt 3a	Military, †3	2		Mt 4a	Military, †3	2	
Pt 3	Physical Education, 2	0		Pt 4	Physical Education, 2	0	
		19				18	

SUMMER CAMP

No.	Subject	Cr. Hours
Ce 7s	Highways and Railroads	2
Fy 35s	Silviculture	2
Fy 37s	Forest Mensuration	1
Fy 39s	Forest Products	1
		6

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 3	Soils (Forest), 2 *3	3	Fy 6	Forest Mensuration, 2 *3	3
Bt 35	Plant Anatomy, 2 †4	4	Fy 8	Silvics	2
Eh 5	Technical Composition	2	Fy 10	Nursery Practice, last 9 weeks, *6	1
Fy 5	Forest Mensuration, 2 *3	3	Fy 12	Seeding and Planting	2
	Elective	6		Elective	11
		18			19

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
	First 9 weeks		Bt 42	Forest Pathology, 2 †4	4
Fy 7	Lumber Manufacture	2	Fy 16	Wood Technology, 1 †2	2
Fy 9	Wood Preservation	1	Fy 52	Policy and Economics	4
Fy 51	Regional Silviculture	2		Elective	8
Fy 53	Forest Finance, 3 †2	2			
Fy 55	Forest Management	2			
	Last 9 weeks				
Fy 41	Practice of Forestry, *48	9			
		18			18

CURRICULUM IN WILDLIFE CONSERVATION

A four-year undergraduate curriculum is offered in Wildlife Conservation and a limited number of graduate courses are available to students with sufficient undergraduate background. The four-year undergraduate curriculum in the first year is the same as that for Forestry.

This sequence is arranged to cover a wide field of activities including the management of all types of game, waterfowl, fish and fur bearers on Federal, state, and privately owned land. It includes basic training in the artificial propagation of fish and game, and conservation of non-game species.

This curriculum prepares men for management and extension work in Federal and state departments concerned with the utilization of natural resources, for teaching in colleges and universities, and for research and ex-

perimental work in Federal, state, and college experiment stations. Graduates are eligible for Civil Service examinations prepared by the Federal Government.

The first two years are devoted largely to fundamental and pretechnical subjects which are basic for the applied courses offered in the last two years. A camp course of six weeks' practical experience is required of all undergraduates between the sophomore and junior years. This work is offered at a camp conducted by the Department where forest areas are being operated under a system of wildlife management.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.		Subject	Cr. Hours	No.		Subject	Cr. Hours
Bt	33	Forest Botany, 2 †4	4	Bc	4	Organic Chemistry, 3 †2	4
Ce	1	Plane Surveying	3	Bt	36	Taxonomy, 2 †4	4
Ce	3	Field Work and Plotting, *9	3	En	26	Entomology, 2 *3	3
Fy	13	Forest Protection	2	Mt	4a	Military, †3	2
Mt	3a	Military, †3	2	Ph	10	Incubation and Brooding of Game Birds, 1 †2	2
Zo	9	Ichthyology, 2 †4	4	Zo	10	Ornithology, 2 †4	4
Pt	3	Physical Education, 2	0	Pt	4	Physical Education, 2	0
			18				19

SUMMER CAMP

No.	Subject	Cr. Hours
Fy 35s	Silviculture	2
Fy 37s	Forest Mensuration	1
Fy 45s	General Ecology	3
		6

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bc 5	Biochemistry, 3 †2	4	Eh 6	Technical Composition	2
Bt 41	Biotic Relationships, 2 *3	3	Fm 48	Agricultural Economics	3
Bt 45	Genetics	3	Fy 22	Mapping, 1 *6	3
By 1	Bacteriology, †6	3	Fy 24	Game Food and Cover Planting, 1 *3	2
By 3	Bacteriology	2	Zo 14	Animal Parasitology, 2 *3	3
Zo 13	Mammology, 2 †4	4		Elective	5
		19			18

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
	First 9 weeks		Fy 52	Policy and Economics	4
An 9	Disease and Parasite Control (in wildlife), 3 *3	2	Zo 20	Fish Culture, 2 *3	3
Fy 55	Forest Management	2	Zo 22	Animal Ecology	3
Fy 57	Game Management	2		Elective	9
Zo 19	Fish Culture	1			
Zo 21	Animal Ecology	1			
	Last 9 weeks				
Fy 41	Practice of Forestry, *48	9			
		17			19

CURRICULA IN HOME ECONOMICS

The Department of Home Economics offers curricula based on a consideration of the problems of the contemporary home and responsibilities of the modern home maker. The basic curriculum requires foundation work in the physical and social sciences, and Home Economics courses applying these sciences to problems of the home. In addition the student is required to complete a sequence of fifteen or more hours based on interest in a specialized subject-matter field or in a particular vocation. These sequences are listed below. As it is impossible in the limited time of classroom and laboratory to

develop to a point of skill all the techniques necessary to success in a vocation, the student is expected to make provision during her vacations, or during the school year, for developing the kinds and degrees of skill essential to beginning the vocation she has selected.

Each curriculum includes in its total of 128 hours, 17 to 40 hours of electives in any department of the University for which the student is adequately prepared. These electives may be used to strengthen the individual's general education or her vocational preparation.

Basic Curriculum in Home Economics

Required of all students majoring in the department.

FRESHMAN YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ch 5	Inorganic Chemistry, 2 †4	4	Bc 4	Organic Chemistry, 3 †2	4
Eh 1	Composition	3	Eh 2	Composition	3
Gc 1	Intro. to Soc. Sci.	3	Gc 2	Intro. to Soc. Sci.	3
He 1	Intro. to Home Economics	3	He 2	Clothing Selection Problems	3
He 3	Design, 1 †4	3	He 4	House Furnishing, 2 †2	3
Pe 1	Physical Education, 2	0	Pe 2	Physical Education, 2	0
		16			16

SOPHOMORE YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
He 5	Foods, 2 †4	4	He 6	Foods, 2 †4	4
Py 1	General Psychology, 2 †2	3	Py 2	General Psychology, 2 †2	3
Sequence and Elective		9	Zo 12	Human Physiology, 3 †4	5
Pe 3	Physical Education, 2	0	Sequence and Elective		4
			Pe 4	Physical Education, 2	0
		16			16

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
By 3	Bacteriology	2	By 10	Sanitation, first 12 weeks	2
By 5	Bacteriology, †2	1	He 10	Home Care of Sick, last 6 weeks	1
Sy 1	General Sociology	3	He 14	The Pre-School Child	3
Sequence and Elective		10	Sequence and Elective		10
		16			16

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
He 11	Household Management	2 or 3	*He 22	Household Admin.	3
He 53	Family Economic Problems	2 or 3	*He 70	Survey Examination	1 or 2
Ee 5a	Household Equipment	3	Sequence and Elective		12 or 11
Sequence and Elective		7 to 9			
		16			16

* May be taken in the fall as He 21 and He 69.

Sequences

HOME ECONOMICS EDUCATION. 35-47 hours.

This sequence fulfills the requirements for State certification of junior and senior high school teaching of Home Economics and of certain science courses, and qualifies the student to receive, after a year of successful teaching experience, the vocational certificate which makes her eligible to teach in those schools which offer vocational programs with Federal support. Students who are accepted for Course 75 (76), and complete it successfully, qualify for the vocational certificate without further experience.

Requirements are as follows:

Bc 5	Biochemistry	4
Ed 65 (66)	Educational Measurements	3

He 7; 8 (or 9)	Clothing Construction Problems	2
He 51; 52b	Advanced Clothing	6
He 56	Home Economics Education	3
He 57a	Food Preservation	1
He 57b	Demonstrations	1
He 63	Nutrition	2
He 66	Dietetics	2
He 71 (72)	Supervised Teaching	2
He 73. 74 or He 75 (76)	Supervised Field Teaching / Apprentice Teaching	4 or 16
He 78	Advanced Home Economics Ed.	2
He 85 (86)	School Lunch	1
Pb 1 (2)	Public Speaking	2
		35-47

There is a demand for teachers prepared and certified to handle other high-school subjects in combination with Home Economics. Students who take this sequence are advised that it may be wise to choose their electives, in order to prepare themselves for certification in an additional subject. Pj 2, 4, Summer Project, is also recommended.

Extension Teaching. 32-34 hours.

This sequence prepares the student for work as a home demonstration agent or a 4-H Club agent.

Bc 5	Biochemistry	4
Eh 28	Departmental or Feature Writing	3
He 56	Home Economics Education	3
He 7; 8, or 9	Clothing Construction	2-4
He 51, 52a, 52b	Advanced Clothing	9
He 57a	Food Preservation	1
He 57b	Demonstration	1
He 63	Nutrition	2
He 65	Dietetics	2
He 81	Institutional Foods	3
Pb 1 (2)	Public Speaking	2

Further work in home economics, especially in institutional foods and in clothing, in education, in journalism, and in the social sciences is strongly

TWO-YEAR COURSE IN AGRICULTURE

This is a course of training for young men who wish to become practical farmers, farm superintendents, dairymen, poultrymen, fruit-growers, or gardeners, but who cannot devote time to full high school or college training. It is also open to women.

The same equipment is used as in the four-year curricula, but the work is more elementary in nature. Most of the classes are separate and distinct from the four-year classes.

Students who have satisfactorily completed two years of high-school work are eligible for registration.

There are no entrance examinations required of those who desire to enter the Two-Year Course.

On completion of the course a certificate is awarded those who have satisfactorily met the requirements.

Curriculum for Two-Year Course in Agriculture

FIRST YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Animal Husbandry, 2 †2	3	Carpentry, †4	2
*Business Arithmetic	2	Dairy Husbandry, 2 †4	4
Farm Botany, 1 †2	2	English	2
Farm Chemistry	2	Farm Economics	2
Farm Crops, 2 †2	3	Fruit Growing, 2 †2	3
Forge Work, *3	1	Poultry Husbandry, 2 †2	3
*Fruit Handling, 2 †2	3	Soils and Fertilizers, 3 *3	4
*Potato Production, 2 †2	3		
Poultry Husbandry, 2 †2	3		
	19 or 20		20

SECOND YEAR

Subject	Hours	Subject	Hours
Animal Husbandry, 2 †2	3	Animal Husbandry, 3 †2	4
Animal Husbandry (Common Diseases of Farm Animals)	3	English	2
English	2	Farm Crops, 2 †2	3
Farm Engineering and Mechanics, 2 *3	3	Farm Machinery, 2 *3	3
Farm Insects, 1 †2	2	Forestry (Fy 20)	2
Farm Management, 2 *3	3	Marketing Farm Products	3
Poultry Husbandry	2	Small Fruit Culture and Plant Propagation, 2 †2	3
Vegetable Growing, 2 †2	3		
	21		20

* Two of these three subjects to be elected with approval of the Director of Short Courses.

A description of subjects offered will be found on page 150.

SHORT COURSES IN THE COLLEGE OF AGRICULTURE

Short Courses are offered to the large number of young men and women and adults who are engaged or about to engage in agricultural or homemaking pursuits and who desire to devote a short time during the winter months to the securing of definite instruction along the line of their special interests.

Courses of three weeks' duration are available in Dairy Production, Poultry Raising, Potato Production, and other subjects. Courses of shorter duration in other specialized subjects are also available.

Applicants for admission must be at least sixteen years of age and have had a good common-school education. Information concerning short courses may be secured by addressing the Director of Short Courses, College of Agriculture.

FARM AND HOME WEEK

There are a large number of people who cannot come to the college for a great length of time, but who desire a few days of practical instruction. To reach and accommodate these, "Farm and Home Week" is held. Lectures

on practical agricultural subjects are given morning, afternoon, and evening. Practical demonstrations occupy a part of each afternoon. Besides the practical subjects discussed, one or more sessions are given up to problems of rural betterment. Considerable emphasis is placed on agricultural marketing problems peculiar to Maine. The homemaking program includes the various phases of home management and is of interest to both rural and urban homemakers. Dates and programs may be secured each year by addressing the College of Agriculture.

THE EXTENSION SERVICE

The Extension Service is organized as a department of the College of Agriculture. It operates under the provisions of the Smith-Lever and Capper-Ketcham Acts, receiving its funds from State and Federal sources.

Its personnel is made up of two groups of agents. One group, the County Extension Agents, consists of agricultural agents, home demonstration agents, and club agents, having their headquarters within the counties in which they serve. The other group, the State Agent force, consists of a limited number of specialists and leaders having their headquarters at the University but working with and assisting the County Extension Agents.

The Extension Service through these men and women gives direct assistance to people living on the farms and in the rural and urban homes of this state. The Farm Bureau, an organization having a membership of more than 10,000 men and women, coöperates with the Extension Service in the determination and development of its county and community programs of work.

Extension Lecture Courses

Lectures in these courses are given under the auspices of granges, clubs, societies, and other gatherings by the members of the agricultural faculty.

A complete list of the lectures will be forwarded on request.

Correspondence Service

It is recognized that a letter is a poor substitute for a personal conference in dealing with perplexing problems with which people are constantly confronted in the vocations of agriculture, forestry, and home economics, but the teachers in all departments of the College are always ready to furnish information dealing with these problems and thus render the greatest possible service to the people of the State. The College of Agriculture, therefore,

welcomes inquiries on practical agricultural, forestry, and home economics topics. Extension bulletins dealing with different phases of these subjects are published at frequent intervals throughout the year and will be sent without cost to persons applying for them. A list of bulletins and circulars available for distribution will be forwarded on request.

Departments of Instruction

NOTE.—A star (*) before the time designated for a course indicates that three or sometimes more hours of actual work are required to obtain credit for one hour; a dagger (†) indicates that two hours are required to obtain this credit.

Courses designated by an odd number are given in the fall semester; those designated by an even number, in the spring semester.

When a course is offered in the first semester and also repeated in the second, it is designated by two numbers, the second of which is in parenthesis.

Two-semester courses designated with a period between the two numbers (e.g., 1. 2) may be taken either semester; when a semicolon appears between the two numbers (e.g., 1; 2), the first semester is prerequisite to the second; and when a dash appears between the two numbers (e.g., 1-2), both semesters must be taken to obtain credit.

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are for graduates and undergraduates; courses numbered above 100 are primarily for graduates.

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

PROFESSOR MERCHANT; PROFESSOR JONES; ASSOCIATE PROFESSOR DOW; ASSISTANT PROFESSOR NIEDERFRANK

48. AGRICULTURAL ECONOMICS.—An introductory course in the principles of economics as applied to agriculture. Consideration given to the development of commercial agriculture, price-making forces, production factors, land policy, land tenure, foreign trade, taxation, credit, marketing, and farm management. This course is intended to give a broad foundation training in this subject. *Three hours a week. Three credit hours.*

MR. JONES

52. FARM ACCOUNTING.—All forms of farm records; farm inventories, cash accounts, single-enterprise cost accounts, complete farm-cost accounting system, and miscellaneous records. Special emphasis is given to the interpretation of results and their practical application in the management of farms. Classroom, *one hour a week;* laboratory, **six hours a week. Three credit hours.*

MR. JONES

62. Agricultural Business Accounting.—This course includes accounting methods for different types of farm business organizations, such as coöperative marketing associations, creameries, cheese factories, Grange stores, and other similar organizations. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Niederfrank

65. Forest Accounting.—This course includes accounting methods for the different types of logging and lumbering operations. It involves problems in cost and income factors, and profit and loss statements of various kinds of forest operations. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Niederfrank

73. Advanced Agricultural Economics.—An advanced course in some of the more important economic problems facing agriculture, such as effects of various governmental policies, agricultural relief, production control, protective tariff, foreign trade and competition, agricultural organization, tenancy, and similar problems. Prerequisite, Course 48. *Two hours a week. Two credit hours.* Mr. Jones

74. Farm Management.—Farming as a business; size of business; balance; production rates; labor efficiency; crop rotations; machinery; farm layout; building arrangement; choosing and buying a farm; ways of starting to farm; and study of farm organization and management of specific farms in the vicinity. Classroom, *three hours a week;* laboratory, **three hours a week. Four credit hours.* Mr. Jones

75. Agricultural Statistics.—Course consists of practical problems in frequency distribution; averages; measurements of dispersion; measurements of trends; seasonal variations and cyclical fluctuations; simple index numbers; simple linear and non-linear correlations; and standard and probable errors. Classroom, *one hour a week;* laboratory, **three hours a week. Two credit hours.* Mr. Merchant

76. Agricultural Marketing.—The first part of the course deals with the economic principles of the present marketing structure and its operation. The latter part involves the study of distribution and marketing of potatoes, apples, wheat, wool, hay, peaches, tobacco, truck crops, dairy products, poultry and poultry products, beef cattle, sheep, and hogs. *Three hours a week. Three credit hours.* Mr. Merchant

77. Agricultural Finance.—The farmers' credit needs are considered. Sources of credit available to farmers and conditions under which loans are made. Special attention is given to the study of the Farm Credit Administration, banks, and individual creditors, as they affect credit conditions in the various farming sections in Maine. *Two hours a week. Two credit hours.* Mr. Merchant

78. Marketing Potatoes.—A specialized course in the marketing of potatoes emphasizing trends in production, regional competition, grades, containers, storage, transportation, sale methods, and price relationships. *Three hours a week. Three credit hours.* Mr. Libby

79. Cooperative Marketing.—Principles involved in coöperative organizations including the more important factors affecting the efficiency and success of coöperative organization, such as volume of business, capital and finance, management, and price policies. The history, organization, and management of coöperative associations marketing the more important agricultural products. *Two hours a week. Two credit hours.* Mr. Dow

81. 82. Current Economic Problems.—Study of the effect of changing economic conditions and various governmental policies on our agriculture. All economic phases of the problems are considered, including farm management, prices, foreign trade, marketing, credit, taxation, agricultural adjustments, and associated fields. *One hour a week. One credit hour.* Members of the Departmental Staff

83-84. Thesis.—A thesis may be written on any problem in agricultural economics, farm management, marketing, agricultural finance, agricultural statistics, or agricultural prices. Prerequisite, permission to register. *Credit, arranged.* Members of the Departmental Staff

85. Marketing Dairy Products.—A specialized course considering the marketing of dairy products, with special emphasis on milk and cream in New England. Factors to be studied include production areas; utilization of milk; grades; transportation; storage; market channels; sales methods; prices; government regulation; foreign trade; demand; and city distribution. *Three hours a week. Three credit hours.* Mr. Dow

86. Agricultural Marketing (Apples and Small Fruits).—A specialized course in the economic factors involved in marketing apples and small fruits with special emphasis on New England. The topics considered are production, varieties, regional competition, grades, containers, storage, transportation, finance, sales methods, and the costs of marketing. *Two hours a week. Two credit hours.* Mr. Niederfrank

87. Agricultural Prices.—The underlying factors causing price changes in agricultural commodities, effects of inflation and deflation, interrelationship of supply and prices, long-time trends, seasonal variation, cyclical movements, agricultural price-raising measures. *Three hours a week. Three credit hours.* Mr. Jones

89. Marketing Poultry Products.—A specialized course in the economic factors involved in the marketing of eggs and poultry. Special con-

sideration will be given to areas of production; grades; containers; transportation; storage; market channels; sales methods; foreign trade; demand; price; Federal participation; and costs of marketing. *Two hours a week. Two credit hours.* MR. DOW

91. LAND UTILIZATION.—Utilization of the land area for various purposes, such as for agriculture, forestry, recreation, and industry, giving primary attention to agriculture. Physical factors and economic conditions determining utilization of farm land, production areas for important farm commodities, shifts taking place in these areas, trends in population and consumption, land classification, land values, and land policy. Land utilization programs. *Three hours a week. Three credit hours.* MR. JONES

92. RURAL TAX PROBLEMS.—National, state, and local problems connected with rural taxation. The effect of increased tax burdens on farmers. Growth of public expenditures; sources of public revenues; the general property tax and its administration. How income, inheritance, and gasoline taxes affect farmers. Tax reform proposals. Problems involved in an equitable distribution of the tax burden. *Two hours a week. Two credit hours.* MR. JONES

101. PRODUCTION COSTS.—Cost of producing important farm commodities in Maine and in competing areas; relation of cost of production to price; and efficiency of production under varying economic conditions. Prerequisite, Course 52. *Two hours a week. Two credit hours.* Additional credit may be arranged for special problems done in connection with this course. MR. JONES

102. ADVANCED AGRICULTURAL STATISTICS.—A continuation of Course 75 giving special attention to the methods and practical application of correlation analysis involving two or more variables, multiple correlation, and linear and curvilinear relationships. Prerequisite, Course 75, and permission to register. *Credit, arranged.* MR. DOW

103. ADVANCED FARM MANAGEMENT.—A continuation of Course 74 with special emphasis on the organization and management of specified types of farms under certain economic conditions, farm prices, and labor efficiency. The student is given an opportunity for study along some line in which he has a special interest. Prerequisite, Course 74. *Credit, arranged.* MR. JONES

104. ADVANCED AGRICULTURAL MARKETING.—Advanced work in the marketing of a specific agricultural commodity. Special emphasis is given to marketing potatoes, apples, poultry, eggs, milk, butter, and cheese. Problem method is followed. Prerequisite, permission to register. *Credit, arranged.* MR. MERCHANT, MR. NIEDERFRANK

AGRICULTURAL EDUCATION

PROFESSOR HILL; ASSISTANT PROFESSOR ELLIOTT

1. 2. PRACTICE TEACHING.—Both majors and minors in agricultural education are expected to do directed teaching in an approved school, either during or at close of the spring semester of the junior year; or immediately preceding or during the fall semester of the senior year; or during the spring semester of the senior year. *Time and credit arranged. Total credit, four hours.* MR. HILL

3. 6. SPECIAL METHODS IN TEACHING AGRICULTURE.—State and Federal legislation; the curriculum; teaching methods and lesson plans; building the course of study; making teaching plans for the year; rooms and equipment; part-time and evening school work; Future Farmers of America; long-time and annual programs of work; reviews, examinations, grades; classroom management. *Two hours a week. Two credit hours.* MR. HILL

5. SUPERVISED FARM PRACTICE.—Requirements for supervised farm practice; its importance; selection of projects; project plans; project records; project supervision; long-time supervised farm practice programs; project budgeting; giving credit for supervised farm practice; project contests. *Two hours a week. Two credit hours.* MR. HILL

8. METHODS OF TEACHING FARM SHOP.—A course in methods for teachers of vocational agriculture stressing importance of meaning, aims, and purposes; choosing type of shop; tools and equipment; determining how to organize shop; shop texts and references; content of courses; organizing the course content. *Two hours a week. Two credit hours.* MR. HILL

AGRONOMY AND AGRICULTURAL ENGINEERING

PROFESSOR CHUCKA; ASSISTANT PROFESSOR SWIFT; ASSISTANT PROFESSOR RALEIGH; ASSISTANT PROFESSOR LIBBY

Soils and Fertilizers

1. SOILS.—Origin, types, physical and chemical properties of soils and their relation to crop production. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. LIBBY

3. SOILS (FOREST).—Origin, types, physical and chemical properties of soils as related to forests. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. SWIFT

5. Soil Formation, Erosion, and Conservation.—Soil-forming rocks and minerals, agencies involved in soil formation; causes, types, and extent of soil erosion; principles and methods of soil conservation. Classroom, *three hours a week. Three credit hours.* Mr. Chucka

6. Soils and Fertilizers.—Physical and chemical composition of soils and fertilizers as related to time and method of application, residual effects of fertilizers, fertilizer injury and fertilizer placement. Classroom, *two hours a week. Two credit hours.* Mr. Chucka

51. Soil Fertility.—Principles involved in the improvement and maintenance of soil fertility through the use of lime, stable manures, green manures, and commercial fertilizers. Classroom, *two hours a week. Two credit hours.* Mr. Chucka

52. Soil Classification, Surveying, and Mapping.—Theories, methods, and uses of soil classification, surveying, and mapping. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Swift

54. Soil Analysis.—Principles, methods, and practical value of the various field and laboratory methods of soil analysis. Prerequisites, Courses 1 and 6. Classroom, *one hour a week;* laboratory, *†four hours a week. Three credit hours.* Mr. Chucka

Crops

11. Field Crops.—A course dealing with the principal field crops of the United States with special reference to crops important in New England. Consideration is given to general culture, use, and their adaptation. Classroom, *two hours a week;* laboratory, *†two hours a week. Three credit hours.* Mr. Raleigh

13. Weed Identification and Control.—Characteristics of weeds, their sources, method of reproduction, dissemination, migration, and methods of control. Prerequisites, Course 11 and Botany 2. Laboratory, *†four hours a week. Two credit hours.* Mr. Raleigh

14. Sweet Corn, Beans, and Peas.—The production of sweet corn, beans, and peas for canning purposes. Classroom, *one hour a week;* laboratory, *†two hours a week. Two credit hours.* Mr. Raleigh

15. Potato Production.—A general study of all factors involved in the production of potatoes. Varieties, seed selection, preparation of land, planting, fertilization, spraying, harvesting, storing, grading, and marketing. Classroom, *two hours a week;* laboratory, *†two hours a week. Three credit hours.* Mr. Libby

16. Forage and Pasture Crops.—Grasses, legumes, and root crops, their management and uses for forage and pasture. Prerequisite, Course 11. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Raleigh

60. Crop Improvement.—Principles and methods involved in field-crop improvement and methods of testing new varieties. Prerequisite, Botany 45. *Three hours a week. Three credit hours.* Mr. Raleigh

62. Seed Potato Production.—A specialized study of the factors involved in seed potato production emphasizing selection of foundation seed stock, tuber unit planting, potato diseases, roguing, certification and development, and testing of new varieties. Prerequisite, Course 15. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*
Mr. Libby

*78. Marketing Potatoes.—A specialized course in the marketing of potatoes, emphasizing trends in production, regional competition, grades, containers, storage, transportation, sale methods, and price relationships. *Three hours a week. Three credit hours.* Mr. Libby

Agricultural Engineering

30. Agricultural Engineering.—A general course covering briefly all phases of agricultural engineering. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Swift

33. Farm Structures.—Planning, designing, and the construction of farm buildings; water systems; heating systems; sewage disposal; and the use of concrete on the farm. Classroom, *two hours a wwek;* laboratory, **three hours a week. Three credit hours.* Mr. Swift

34. Farm Shop.—Training in the care and use of tools and equipment for ordinary construction and repair work found necessary on the farm. †*Four hours a week. Two credit hours.* Mr. Swift

35. Drainage and Land Reclamation.—A course covering the principles and practices of surveying, mapping, and leveling on the farm; improving and reclaiming farm lands. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Swift

---

*The description of this course also appears under the Department of Agricultural Economics and Farm Management and should be registered for under the designation, Fm 78.

36. Farm Machinery and Power.—Simpler laws of mechanics as applied to farm machinery; the operation, adjustment, care, and efficiency of the more important farm machines; the application of power to farm operations and the operation, care, and repair of various forms of motors used for agricultural purposes. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Swift

41. School Shop.—Instruction in fundamental tool operations in woodworking and forge work. Registration restricted to laboratory facilities. *Shop, †two hours a week. One credit hour.* Mr. Swift

42. School Shop.—Instruction in agricultural drawing, painting, furniture repairing and refinishing, cold metal work, plumbing. Registration restricted to laboratory facilities. Shop, †*two hours a week. One credit hour.* Mr. Swift

43. School Shop.—Instruction in concrete work, drainage, farm electricity, repairing of farm machinery. Registration restricted to laboratory facilities. Shop, †*two hours a week. One credit hour.* Mr. Swift

44. School Shop.—Instruction in harness repairing, power transmission, sheet metal work and soldering, tool fitting. Registration restricted to laboratory facilities. Shop, †*two hours a week. One credit hour.* Mr. Swift

Agronomy and Agricultural Engineering (General)

81. 82. Seminar.—Study of recent literature, problems and experiments pertaining to soils, crops, and agricultural engineering. For juniors and seniors majoring in Agronomy. *One hour a week. One credit hour.* Members of the Departmental Staff

83. 84. Special Problems in Agronomy and Agricultural Engineering.—*Credit, arranged.* Members of the Departmental Staff

85-86. Thesis.—*Credit, arranged.* Members of the Departmental Staff

ANIMAL INDUSTRY

Professor Corbett; Professor Dorsey; Professor Smyth; Assistant Professor Gardner; Assistant Professor Hall; Assistant Professor Witter; Mr. Smith; Mr. Dike

Animal Husbandry

2. General Animal Husbandry.—The live stock industry, local and regional, including a study of breed histories and developments, and

market types and classes. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. CORBETT, MR. HALL

3. CARE, FEED, AND MANAGEMENT OF LIVE STOCK.—Selection, breeding, growing, and maintenance of horses, cattle, sheep, and swine. Consideration is given to general principles of nutrition as applied to live stock, composition of feed stuffs, comparison and use of feeding standards, and calculating rations. Prerequisite, Course 2. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.* MR. CORBETT, MR. HALL

42. ADVANCED LIVE STOCK JUDGING AND MANAGEMENT.—A laboratory course in which the individual student gets experience in handling live stock and preparation of stock for show ring and market. In so far as it is practicable, visits will be made to live stock farms. †*Two hours a week. One credit hour.* MR. HALL

44. ADVANCED LIVE STOCK FEEDING AND MANAGEMENT.—Nutrition and feeding experiments, as well as the methods and practices of the most successful feeders in production of milk, meat, and rearing of horses. Prerequisite, Course 3. *Two hours a week. Two credit hours.* MR. CORBETT

55. ANIMAL NUTRITION.—The physiology of digestion; the metabolism of carbohydrate, fat, protein, and mineral nutrients; net energy and methods used in determining energy values. Application of nutritional theories to practical feeding problems. Prerequisite, Course 44. *Two hours a week. Two credit hours.* MR. CORBETT

57. 58. PROBLEMS IN ANIMAL HUSBANDRY.—*Credit, arranged.* MR. CORBETT

60. ADVANCED ANIMAL BREEDING.—Principles and theories of breeding as applied to the live stock industry; study of pedigrees and records using the breed herd books; and economic study of the generative systems of domestic animals. Prerequisite, Course 3. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* MR. HALL

63. 64. SEMINAR.—Preparation and presentation of papers dealing with topics in the field of Animal Husbandry. *One hour a week. One credit hour.* MR. HALL

65. ADVANCED ANIMAL INDUSTRY.—Market classes and types; pasture and feed lot management; and farm and packing house methods of preparing animal products for the market. Prerequisite, Course 3. *Two hours a week. Two credit hours.* MR. HALL

Animal Pathology

5. ANATOMY OF DOMESTIC ANIMALS.—A general course in comparative anatomy of the domestic animals and birds. Emphasis is placed on the

important histological features, and those parts of the body involved in the common diseases. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. WITTER

6. PHYSIOLOGY OF DOMESTIC ANIMALS.—Principles of physiology as applied to domestic animals including birds. Special emphasis is placed on comparative features, especially of the circulatory, respiratory, digestive, and uro-genital systems. *Three hours a week. Three credit hours.* MR. WITTER

7. ANIMAL HYGIENE.—Principles of hygiene and sanitation applied to prevention and control of common diseases of domestic animals. Special attention given to the fundamentals of disease processes. Prerequisite, Course 6. *Two hours a week. Two credit hours.* MR. WITTER

8. ANIMAL PATHOLOGY.—A study of infectious and parasitic diseases of domestic animals including the principles of immunology as applied to biological treatment and prevention. Prerequisite, Course 7. *Two hours a week. Two credit hours.* MR. WITTER

9. DISEASE AND PARASITE CONTROL (IN WILD LIFE).—A study of known infectious and parasitic diseases of game and fur-bearing animals, emphasizing preventive and control measures. First half-semester. Classroom, *three hours a week;* laboratory, **three hours a week. Two credit hours.* MR. WITTER

Ph 8. POULTRY DISEASES.—Principles of hygiene and sanitation applied to the prevention and control of the diseases of poultry, including a detailed consideration of the pathological processes involved in the common diseases. *Two hours a week. Two credit hours.* MR. WITTER

Dairy Husbandry and Dairy Technology

1. GENERAL DAIRYING.—Milk, its secretion, composition, properties, pasteurization, and separation. Dairy practices in producing and handling milk and cream. Dairy equipment; use of common dairy machinery. Testing dairy products for fat (Babcock method), acidity, total solids, and common adulterations. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. DORSEY, MR. SMITH

2. BUTTER MAKING.—Creamery butter industry. Starter making, cream ripening, churning, and preparing butter for market. Prerequisite, Course 1. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. SMITH

3. CHEESE MAKING.—Manufacture and curing of various types of cheese, including cheddar and soft cheeses adapted to the New England trade.

The laboratory work requires six consecutive hours. Prerequisite, Course 1. Classroom, *two hours a week;* laboratory, **six hours a week. Four credit hours.* Mr. Dorsey

4. Condensed Milk.—Manufacture of unsweetened and sweetened condensed milk, and milk powder. Sanitary control of milk supply, factory methods, defects in products, and economic phases of the industry. Prerequisite, Course 1. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Dorsey

5. Market Milk.—The market milk industry from standpoints of production, supply, sanitary control, transportation, processing, delivery, organization, and economic aspects. Prerequisite, Course 1. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.* Mr. Dorsey

6. Judging Milk and Milk Products.—Study and practice of methods employed in scoring and judging milk and milk products. Prerequisite, Course 1. †*Two hours a week. One credit hour.* Mr. Dorsey

51. Dairy Technology.—Milk products and by-products, methods of manufacture and processing, and scrutiny of recent literature relating to advances in dairy technology. Lectures and assigned readings. Prerequisite, Course 1. *Two hours a week. Two credit hours.* Mr. Dorsey

53. 54. Problems in Dairy Husbandry.—*Credit, arranged.* Mr. Dorsey

55. Dairy Refrigeration.—Principles of refrigeration, refrigeration machinery and equipment, and applications of refrigeration to milk and milk products. *Two hours a week. Two credit hours.* Mr. Dorsey

58. Ice Cream Making.—Manufacture of ice cream and ices. Prerequisites, Courses 51 and 55. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Dorsey

61. 62. Dairy Technology Seminar.—Study of recent and current literature dealing with research problems and the industrial applications of research findings in the technological field of the dairy industry. For seniors majoring in Technology. *One hour a week. One credit hour.* Mr. Dorsey

63. Advanced Dairy Products Testing.—Testing milk and milk products by the Mojonnier method. Open to senior students in the Department of Animal Industry. †*Two or four hours a week. One or two credit hours.* Mr. Dorsey

64. Advanced Dairy Products Control.—Approved methods of testing dairy products, chemical, physical, and bacteriological used for control

purposes in the dairy industry and the practical application of such new tests as they are introduced. Prerequisite, Course 63. †*Four hours a week. Two credit hours.* MR. DORSEY

66. DAIRY MACHINERY.—Milk and milk-products machinery, accessory machinery, and plant layout. Prerequisite, Course 51. †*Four hours a week. Two credit hours.* MR. DORSEY

Poultry Husbandry

1. GENERAL POULTRY HUSBANDRY.—A general course in poultry production, incubation, brooding, housing, feeding, and management. Laboratory work includes production judging, preparation of poultry products for market, egg grading, and other poultry management practices. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. SMYTH

2. POULTRY BREEDING.—Principles of breeding as applied to poultry inheritance of egg productivity; systems of breeding; and study of pedigrees and breeding results. Some time is given to a study of methods used by successful poultry breeders. Prerequisites, Course 1 and Botany 45. Classroom, *two hours a week. Two credit hours.* MR. SMYTH

3. EXHIBITION AND PRODUCTION POULTRY JUDGING.—Selection and mating of fancy and utility poultry. Laboratory practice in judging fancy and utility poultry, and a study of the standard requirements of the breeds. Prerequisite, Course 1. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* MR. GARDNER

4. INCUBATION AND BROODING.—Principles of incubation and brooding. Laboratory practice in incubator and brooder management. Prerequisite, Course 1. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. SMYTH

5. POULTRY FEEDING.—General principles of nutrition as applied to poultry; poultry feeds; calculating rations; estimating cost of feeds and feeding; and methods of feeding for economical production. Prerequisite, Course 1. *Two hours a week. Two credit hours.* MR. GARDNER

6. POULTRY FARM MANAGEMENT.—The business of poultry farming; systems and operations in use on large poultry farms; planning of specialized poultry farms. In so far as is practicable, visits will be made to poultry farms. Prerequisites, Courses 1, 2, 3, and 5. Classroom, *one hour a week;* laboratory, †*two hours a week. Three credit hours.* MR. GARDNER

7. POULTRY SEMINAR.—A study of poultry organizations and literature giving results of recent research work in the field of poultry husbandry.

Prerequisites, Courses 1, 2, and 3. Classroom, *two hours a week. Two credit hours.* Mr. Smyth

10. Incubation and Brooding of Game Birds.—Principles of incubation and brooding; study of equipment and practical methods of brooder and range management. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Smyth, Mr. Gardner

51. 52. Problems in Poultry Husbandry.—*Credit, arranged.* Mr. Smyth

BACTERIOLOGY AND BIOCHEMISTRY

Professor Hitchner; Professor Smith; Assistant Professor Highlands; Assistant Professor Pedlow; Mr. Dick

Bacteriology

1. Bacteriology.—A laboratory course in general bacteriology. Open to all students. The work includes the preparation of the usual culture media and study of morphological and biological characteristics of typical bacteria. Some outside reading is required. Course 3 must be taken in conjunction. †*Six hours a week. Three credit hours.*

Mr. Hitchner, Mr. Highlands, Mr. Dick

2. Bacteriology.—Similar to Course 1. Offered for students in the College of Technology and others who may elect it. Special emphasis is placed upon bacteriology of water and sewage. Prerequisite, Course 3. †*Six hours a week. Three credit hours.* Mr. Highlands, Mr. Dick

3. Bacteriology.—A lecture course open to all students. It must be elected by students taking Course 1. Subjects considered include: the history of bacteriology; classification and biological characteristics of bacteria; bacteria in air, water, soil, and dairy products; relation of bacteria to health and disease; and immunity. *Two hours a week. Two credit hours.*

Mr. Hitchner

5. Bacteriology.—An abbreviated laboratory course in general bacteriology. Practical demonstrations of the relation of bacteria to disease, sanitation, food handling, and other economic phases are given. The aim is to develop appreciation of bacteriological technic. Course 3 must be taken in conjunction. †*Two hours a week. One credit hour.* Mr. Highlands

10. Sanitation and Public Health.—General consideration of the relationship between the health of the individual and environment. Special

emphasis placed on communicable diseases and their control. Sanitary programs for the home and community will be considered, such as sewage disposal, safe water supplies, industrial sanitation, and dust menaces. Prerequisite, Course 3. *Two credit hours.* MR. HIGHLANDS

52. BACTERIOLOGY.—Physiological, morphological, biochemical, and serological activities of bacteria; isolation and identification of pathogens together with animal inoculation and serological tests. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. HITCHNER

54. BACTERIOLOGY (DAIRY).—Effect of pasteurization on milk bacteria; quantitative bacterial determination of butter and cheese; study of typical milk bacteria; use of special biochemic tests for quality of milk; and study of effect of separators, clarifiers, coolers, etc., on the bacterial content of milk and cream. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a weke;* laboratory, †*four hours a week. Three credit hours.* MR. HITCHNER

55. BACTERIOLOGY (SOIL).—A theoretical and experimental consideration of the relationship of microörganisms and soil fertility. A study of the factors which influence the changes produced through microbial action. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. HITCHNER

56. FOOD TECHNOLOGY.—A general course in the principles and the applications of food conservation, with especial reference to commercial practices in canning, drying, freezing, and special problems. Open to seniors and other students whose training in bacteriology and chemistry meets the approval of the instructor. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. HIGHLANDS

61. 62. SEMINAR.—Preparation and presentation of papers dealing with current researches and developments in the fields of bacteriology. *One hour a week. One credit hour.* MR. HITCHNER

101. 102. PROBLEMS IN BACTERIOLOGY.—A laboratory and conference course for students desiring to pursue some particular line of bacteriological investigation. This may include problems in applied bacteriology especially devoted to food technology. Open only to students who have done considerable work in bacteriology. The kind of work is arranged to suit individual students. *Credit, arranged.* MR. HITCHNER, MR. HIGHLANDS

Biochemistry

1. ORGANIC CHEMISTRY.—For agricultural students. A study of the aliphatic compounds; hydrocarbons, alcohols, acids, amines, amides, etc., and

brief resume of the more important aromatic compounds. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*

Mr. Smith

2. Biochemistry.—Plant biochemistry, including a study of the physico-chemical reactions of plants. A detailed study of carbohydrates, fats, and proteins; glucosides; and enzymes. Prerequisite, Course 1. Classroom, *three hours a week;* laboratory, †*four hours a week. Five credit hours.*

Mr. Smith

4. Organic Chemistry.—The aliphatic hydrocarbons, alcohols, acids, amines, amides, etc.; important aromatic compounds; the physico-chemical reactions of plants and animals. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.* Mr. Pedlow

5. Biochemistry.—The carbohydrates, fats, and proteins; chemistry of digestion; respiration, blood, and lymph. Prerequisite, Course 4. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.*

Mr. Pedlow

8. Agricultural Chemistry.—Chemistry of the soil elements; colloidal condition and its effect upon the soil; chemical relationship of fertilizing constituents; and synthetic methods of producing fertilizing ingredients. Prerequisite, Course 1. *Two hours a week. Two credit hours.* Mr. Smith

9. Biochemistry.—Animal biochemistry. Composition of the animal body; chemistry of digestion; assimilation and metabolism of foods; chemistry of blood and lymph; and elimination of waste product. Prerequisite, Course 2. *Two hours a week. Two credit hours.* Mr. Smith

51. Biochemistry.—Detailed study of carbohydrates, fats, and proteins; nature of enzymes and their effect upon food materials; chemical changes involved in digestion, assimilation, and absorption of foods; respiration; chemistry of the blood, including clinical methods of analysis; and elimination of waste material from the animal body. Prerequisite, Course 1 or 4. *Three hours a week. Three credit hours.* Mr. Smith

53. Agricultural Analysis.—A course dealing with quantitative analysis of fertilizers, foods, dairy products, and textile materials. Type of work will be adapted to needs of the student. Prerequisite, Course 1 or 4. †*Four or †six hours a week. Two or three credit hours.* Mr. Pedlow

57. Biological Colloids.—An introduction to colloidal chemistry with application and significance in biological systems. Open to junior, senior, and graduate students. Prerequisites, Courses 1 and 2 or 4 and 5. *Three hours a week. Three credit hours.* Mr. Pedlow

61. Advanced Biochemistry.—A complete consideration of the chemistry of carbohydrates, fats, and proteins with special reference to recent advances in these fields; methods used in biochemical research; special problems in plant and animal biochemistry. Prerequisite, Course 2 or 5. *Three hours a week. Three credit hours.* Mr. Smith

62. Advanced Biochemistry.—A continuation of Course 61, with special reference to literature devoted to the subject matter. Prerequisite, Course 61. *Three hours a week. Three credit hours.* Mr. Pedlow

64. Biochemical Laboratory Methods.—Methods used in the biochemical laboratory for testing carbohydrates, fats, amino acids, proteins, enzymes; studies of the colloidal properties of biochemical material; H-Ion concentration measurement methods; and individual problems dealing with various phases of biochemical investigations. Prerequisite, Course 53. †*Six hours a week. Three credit hours.* Mr. Pedlow

101. 102. Biochemical Research.—Problems dealing with various phases of biological or agricultural chemistry. Special problems may be selected by the student under direction and advice of the Department. A comprehensive written summary is required. Open only to senior and graduate students. *Credit, arranged.* Mr. Smith, Mr. Pedlow

BOTANY AND ENTOMOLOGY

Professor Steinmetz; Associate Professor Dirks; Assistant Professor Steinbauer; Assistant Professor Hyland; Mr. Quimby; Mr. Prince

Botany

2. General Botany.—Fundamental principles of plant life, with special emphasis on life processes. Required of all students in the College of Agriculture excepting those registered in Home Economics. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Steinmetz and Assistants

30. Plant Ecology.—Environmental factors determining adaptations and distribution of plant life. Prerequisite, Course 2. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Steinbauer

32. Plant Physiology.—For students in Forestry. Prerequisites, Course 2 and one year of chemistry. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Steinbauer

33. Forest Botany (Dendrology).—Classroom and field work on characteristics, habits, and classification of trees and native shrubs of North America. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Hyland, Mr. Quimby

34. Forest Botany (Physiography).—A comprehensive study of range, distribution, and soil requirements of commercial timber trees of the United States. Prerequisite, Course 33. Classroom, *one hour a week;* laboratory, †*three hours a week. Two credit hours.* Mr. Hyland

35. Plant Anatomy.—Structure of leaves, roots, and stems of herbaceous and woody plants. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.*
Mr. Quimby, Mr. Hyland

36. Taxonomy.—Flora of the field, woods and stream. Prerequisite, Course 33. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Steinmetz

41. Biotic Relationships.—Interrelationships of plants and animals with emphasis upon fungi and lichens. Prerequisite, Course 36. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.*
Mr. Steinmetz

42. Forest Pathology.—Principles of plant diseases, as applied to seedlings, nursery stock, and forest trees; destruction of timber by fungi; and principles of control. Required of seniors in Forestry. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Steinmetz

43. Wood Identification.—Identification of commercial woods with the unaided eye, lens, and microscope. Open to students in Chemical Engineering. **Three hours a week. One credit hour.* Mr. Hyland

45. General Genetics.—Principles of genetics. Prerequisite, one year of biology. Open to juniors and seniors. *Three hours a week. Three credit hours.* Mr. Steinmetz

46. Genetics Laboratory.—Breeding of Drosophila. Study of plant materials. Supplementary reading. †*Four hours a week. Two credit hours.*
Mr. Quimby

50. Histological Technique.—Methods and technique in the preparation of microscopic sections of plant material. Admission by arrangement with the instructor. Classroom, *one hour a week;* laboratory, **six hours a week. Three credit hours.* Mr. Hyland

53. Plant Physiology.—Classroom and laboratory work on the physiology of plants. Prerequisites, Course 2 and one year of chemistry. Class-

room, *two hours a week;* laboratory, †*four hours a week. Four credit hours.*
Mr. Steinbauer

56. Plant Pathology.—Principles of plant disease. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Steinmetz

57. Taxonomy of Vascular Plants.—Characteristics, identification, and classification of representative species of vascular plants. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory and field, †*four hours a week. Four credit hours.* Mr. Steinmetz

59. General Mycology.—Morphology, identification, and classification of representative species of fungi. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory and field, †*four hours a week. Four credit hours.*
Mr. Steinmetz

Entomology

21. General Entomology.—Fundamental facts and principles of insect life, principles of control, characteristics of the orders and families, and the relations of insects to plants and animals. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Dirks

22. Forest Entomology.—Principles of insect life with special reference to shade and forest trees. Structure, metamorphosis, classification, and methods of control. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Dirks

23. Taxonomy of Insects.—A general course on insects with emphasis upon identification and classification. Methods of collecting, rearing, and mounting insects. Prerequisite, one year of biology. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Dirks

26. Entomology.—Designed for students in Wildlife Conservation. Classification, identification, and life histories. Emphasis upon aquatic life. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Dirks

40. Apiculture.—A practical course in the care of bees. The honeybee, its activities and habits; races of bees; diseases and enemies; and the production and marketing of honey. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Dirks

46. Advanced Forest Entomology.—An intensive study of insects that are destructive to shade and forest trees and to forest products. Prereq-

14. Forest Products.—Forest products other than logs and lumber, such as pulpwood, veneers, shingles, lath, tight and slack cooperage, hoops and headings, excelsior, vehicle woods, spool stock, turpentine, tannin, gums, syrups, dye-woods, and charcoal. Methods of utilization, markets, and values. *Two hours a week. Two credit hours.* Mr. Chapman

16. Wood Technology.—Identification and classification of the commercial woods of the United States based on simple lens inspection; the technical qualities of various species and their uses in the arts and trades. Prerequisite, Botany 33, 34, and 35. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Goodspeed

18. Preparation and Drafting of Maps.—Instruction in the correct drafting, preparation, and coloring of maps. The use of accepted conventional signs and symbols in mapping, and preparation of maps for reports and summaries of field surveys. Prerequisite, Drafting 1, 2a. **Three hours a week. One credit hour.* Mr. Chapman

20. Woodlot Forestry.—General principles of forestry, with special reference and application to farm woodlands, particularly in this region. Lectures and textbook work in elementary systems of cutting, estimating, protection, and reforestation. Especially for agricultural students. Open to all students. *Two hours a week. Two credit hours.* Mr. Chapman

22. Mapping.—Field and office work in the preparation of forest property maps with special reference to type mapping for forest cover, game escape cover, and food cover. Classroom, *one hour a week.* Field work, **six hours a week. Three credit hours.* Mr. Baker

24. Game Food and Cover Planting.—Artificial regeneration and transplanting of trees and shrubs with particular reference to those having a value as game food and cover. Classroom, *one hour a week.* Field work, **three hours a week. Two credit hours.* Mr. Baker

43. 44. Special Problems.—Original investigation in advanced forestry work, the subject to be chosen after consultation with the departmental staff. Open to high-ranking juniors and seniors. *Credit, arranged.*

Members of the Departmental Staff

47-48. Orientation.—A course of lectures for freshmen in Forestry designed to acquaint them with the fields open to forestry and wildlife graduates. *One hour a week. No credit.* Mr. Demeritt

51. Regional Silviculture.—Silvicultural methods; applied systems of silviculture and management considered in relation to commercially important timber species and forest types in the United States. First half-semester. *Four hours a week. Two credit hours.* Mr. Ashman

52. Policy and Economics.—Character, extent, and distribution of forest resources, national, state, private, and foreign. Relation of government, corporations, and individuals to forest resources and applied forest management. Brief discussion of state and Federal forest laws. *Four hours a week. Four credit hours.* Mr. Goodspeed

53. Forest Finance.—Forest valuation and statics. The appraisal of values of stands of timber. Determination of returns from forests under management. Damage appraisal. First half-semester. Classroom, *three hours a week.* Laboratory, †*two hours a week. Two credit hours.*
Mr. Goodspeed

55. Forest Management.—Theory of the normal forest; forest organization and regulation for a sustained yield. Calculations for and preparation of a forest-management plan. First half-semester. *Four hours a week. Two credit hours.* Mr. Goodspeed

57. Game Management.—Production of sustained annual crops of wild game for recreational use. Field studies in game-census work, artificial restocking, and ecological factors controlling game populations. First half-semester. Classroom, *four hours a week. Two credit hours.* Mr. Mendall

101. 102. Forest Mensuration Problems.—*Credit, arranged.*
Mr. Demeritt

103. 104. Forest Management Problems.—*Credit, arranged.*
Mr. Demeritt, Mr. Goodspeed

105. 106. Game Management Problems.—*Credit, arranged.*
Mr. Aldous

107. 108. Research Methods.—*Credit, arranged.* Mr. Aldous

Courses in Camp

35s. Silviculture.—Sophomore year only. Character and form of forest vegetation and recommended treatment of different forest types. Studies to be conducted on areas now operated by Government and private owners. *Sixteen hours a week. Two credit hours.*
Members of the Departmental Staff

37s. Forest Mensuration.—Sophomore year only. Practical field work in the measurement of logs, individual trees and large stands of timber. Forestry instruments. **Eight hours a week. One credit hour.*
Members of the Departmental Staff

39s. Forest Products.—Sophomore year only. Study of forest products other than logs and lumber with particular reference to their manufacture. **Eight hours a week. One credit hour.*

Members of the Departmental Staff

41. Practice of Forestry.—Forestry seniors only. Business principles involved in the management of a forest area including the preparation of a complete working plan. Topographic maps and detailed estimate of stands are included in the plan. Second half-semester. **Forty-eight hours a week. Nine credit hours.* Mr. Ashman, Mr. Goodspeed

45s. General Ecology.—Course covering the field study of flora and fauna in relation to environment. Field work, **twenty-four hours a week. Three credit hours.* Members of the Departmental Staff

HOME ECONOMICS

Professor Greene; Professor Sweetman; Assistant Professor Musgrave; Assistant Professor Wells; Assistant Professor Coney; Mrs. Snyder; Mrs. Loosli; Miss McCarthy; Miss Gould

1. Introduction to Home Economics.—A study of the problems of adjustment to college life and a survey of the professional fields open to Home Economics trained women. *Three hours a week. Three credit hours.*

Miss Greene, Mrs. Loosli, Miss McCarthy

2. Clothing Selection Problems.—Study of factors involved in selection of clothing in good taste. Economic aspects including budgets and detailed study of fabrics and fibers. *Three hours a week. Three credit hours.*

Mrs. Wells

3. Design.—A first course in art expression. The principles of design as they may be applied to house decoration, costume design, advertising and related subjects. Some technique in the use of color, line, balance, rhythm, emphasis, and proportion is acquired in the laboratory. Classroom, *one hour a week;* laboratory, *†four hours a week. Three credit hours.* Miss Musgrave

4. House Furnishing.—Artistic and practical objectives to be attained in furnishing a house. Furniture and materials used. Problems in furnishing plans. Classroom, *two hours a week;* laboratory, *†two hours a week. Three credit hours.* Miss Musgrave

5; 6. Foods.—Selection and preparation of foods in relation to nutritive quality, palatability, digestibility, sanitary quality, and economy and study

of the food market from the consumer's standpoint. Laboratory work in the principles of buying and preparing foods and the planning and serving of family meals. Prerequisites, one year of chemistry; for Home Economics students, Chemistry 5 and Biochemistry 4. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* MRS. SWEETMAN, MRS. SNYDER

7; 8. CLOTHING CONSTRUCTION PROBLEMS.—A laboratory course dealing with the techniques of garment construction. The use of the sewing machine, commercial patterns, selection of materials, fitting, and finishes are included. Prerequisite, Course 3. Laboratory, †*four hours a week. Two credit hours.* MRS. WELLS

9. CLOTHING CONSTRUCTION PROBLEMS.—A laboratory course, covering in one semester material in Course 7; 8. For students who have had adequate previous training in this field. Admission by arrangement only. Laboratory, †*four hours a week. Two credit hours.* MRS. WELLS

10. HOME CARE OF THE SICK.—A study of the principles and practices of care of the sick. Designed to train the student to recognize common symptoms of departure from normal health, to give routine home care in minor illnesses, and to carry out intelligently the directions of a physician. Prerequisite, Bacteriology 3. *One credit hour.* MISS GREENE

11 (12). HOUSEHOLD MANAGEMENT.—Homemaking as a profession. Standards and objectives for household management in the provision of health, contentment, and development of family members. Techniques of management of time and energy to contribute to securing the values of family life. *Two or three hours a week. Two or three credit hours.* MRS. LOOSLI

14. THE PRE-SCHOOL CHILD.—A study of factors involved in physical, mental, social, and emotional development of children. Opportunity for observing and guiding activities of pre-school children in a play school. For Home Economics students. Classroom and laboratory, *arranged. Three credit hours.* MRS. LOOSLI

15. MILLINERY.—Principles of design and color applied to choice of hats. Consideration of materials used and making hats in the prevailing fashion. Given in 1938-39 and alternate years. Open to Home Economics juniors and seniors. Laboratory, †*two hours a week. One credit hour.* MISS MUSGRAVE

17 (18). APPLIED DESIGN.—Application of design principles to problems in textiles including block printing, batik, decorative needlework, and hand weaving. As offered the second semester, the course emphasizes the arts and crafts which may be taught in home economics at secondary-school level. Prerequisite, Course 3. Laboratory, †*four hours a week. Two credit hours.* MISS MUSGRAVE

21 (22). Household Administration.—Students organize and execute activities of the home management house. Emphasis on attitudes essential to satisfactory group living and on managerial ability. Marketing, planning, preparing and serving meals, care of a young child, money management, care of the house, and informal home entertaining. Seniors or juniors by permission. *Three credit hours.* Mrs. Loosli

23 (24). Family Meals.—Food selection and preparation with emphasis on nutritional adequacy, moderate cost, and scientific methods of preparation. For Arts and Sciences students above freshman rank only. Classroom, *one hour a week;* laboratory, †*four hours a week.* (Given one semester only.) *Three credit hours.* Mrs. Sweetman, Mrs. Snyder

25. Economics of the Household.—Planning personal and family expenditures with emphasis on problems of the consumer-buyer. For Arts and Sciences students above freshman rank only. *Two hours a week. Two credit hours.* Miss Greene

26. The Child in the Home.—Functions of the home as an environment for human development; factors involved in the growth and development of children. For Arts and Sciences students. Corresponds in part to Course 14. Laboratory consists of observation of play school. Classroom and laboratory, *arranged. Three credit hours.* Mrs. Loosli

28. Camp Feeding.—Problems involved in selection, purchase, and preparation of food for camp groups. Open only to Forestry juniors by permission of the head of the Forestry Department. Classroom, *one hour a week;* laboratory, **three hours a week. Two credit hours.*

Mrs. Sweetman, Miss McCarthy

51. Advanced Clothing.—Clothing economics including study of fashion, retailing, and standards for consumer buying of clothing. Laboratory problems in selecting and constructing tailored coats and children's clothing. Prerequisites, Courses 2 and 3. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* Miss Musgrave, Mrs. Wells

52a. Advanced Clothing and Costume Design.—A continuation of Course 51. Application of principles of line, color, dark and light, and texture to the designing of costumes for the individual. Draping on the dress form and constructing informal and formal silk dresses. Laboratory, †*six hours a week. Three credit hours.* Miss Musgrave

52b. Advanced Clothing.—Application of design principles to the selection of costumes for the individual. Laboratory study of commercial patterns, fitting atypical figures, flat pattern designing and the making of formal and informal silk dresses. Laboratory, †*six hours a week. Three credit hours.*

Mrs. Wells

53 (54). Family Economic Problems.—A study of family cash and real income as related to American standards of living. Household budgets. Consumer buyer problems. Prerequisite or parallel, Course 11. *Two or three hours a week. Two or three credit hours.* Miss Greene

55 (56). Home Economics Education.—The teaching of home economics in junior and senior high schools. A study of setting up objectives, selecting and organizing teaching units, and choosing effective methods, as illustrated in texts, courses of study, and current literature. *Three hours a week. Three credit hours.* Miss Greene

57. 58, a-c. Unit Courses in Foods.

57a. Food Preservation.—The principles and recommended practices for household food preservation with emphasis on canning. Prerequisites, Bacteriology 3 and 5, and Course 6. *One credit hour.* Mrs. Sweetman

57b (58b). Demonstrations.—The planning and giving of demonstrations illustrating recommended practices for the home with emphasis on food preparation. Open to seniors and juniors by special permission. *One credit hour.* Members of the Departmental Staff

57c (58c). Nursery School Meals.—The planning, preparing, and serving of meals for the nursery school. Prerequisite, Course 65. *One to two credit hours.* Mrs. Snyder

59. 60, a-j. Special Problems.—Individual problems in the various fields of home economics, arranged to enable students to extend their command of subject matter, or develop techniques according to individual interests and needs. *One to three credit hours,* in each subdivision.

59, 60a. Nutrition
59, 60b. Foods
59, 60c. Clothing and Textiles
59, 60d. Design
59, 60e. History of Costume
59, 60f. House Planning and Decoration
59, 60g. Child Development
59, 60h. Household Management
59, 60i. Home Economics Education
59, 60j. Institutional Management

Members of the Departmental Staff

61. History of Costume.—A survey of the development of costume of men and women from the peoples of antiquity, through various periods of European history to the present time. Lectures, reading, and collection of illustrations. *One hour a week. One credit hour.* Miss Musgrave

63 (64). NUTRITION.—Principles involved in normal nutrition at all ages. Prerequisite, Biochemistry 5, or Chemistry 51, 52. *Two or three hours a week. Two or three credit hours.* MRS. SWEETMAN

65 (66). DIETETICS.—Calculation and preparation of dietaries for normal individuals at all ages. Parallel or prerequisite, Course 63. Prerequisite for Home Economics students, a summer project in foods. †*Four hours a week. Two credit hours.* MRS. SNYDER

67 (68). NUTRITION IN ABNORMAL CONDITIONS.—A study of the principles involved in adjusting diets in such diseases or other abnormal conditions as are benefited by variations from normal diets. Laboratory consists of demonstrations of nutritional deficiencies in animals. Prerequisite, Course 63. *Two or three credit hours.* MRS. SWEETMAN

69 (70). SURVEY EXAMINATION.—A comprehensive examination to test the student's command of home economics and related subject matter, and her ability to integrate, organize and present it. Preparation for the examination consists of the making and use of outlines and bibliographies in the major divisions of the field. *One or two credit hours.*
MEMBERS OF THE DEPARTMENTAL STAFF

71 (72). SUPERVISED TEACHING.—Directed teaching in home economics. Students teach classes in the junior and senior high school at Brewer. *Two credit hours.* MISS GOULD

73. 74. SUPERVISED FIELD TEACHING.—Observation, participation, and teaching for a two weeks period each semester in a selected junior or senior high school in the state, under the immediate direction of the local teacher. *Two weeks full time. Two credit hours,* each semester. MISS CONEY

75 (76). APPRENTICE TEACHING.—Apprentice teaching in high school under the immediate supervision of a qualified local home economics teacher approved by the State Department of Education. Open only by selection in coöperation with the State Department of Education, to students chosen on the basis of their own request, their academic and personnel records, and the success of their teaching in Course 71. Students who complete this course successfully receive a vocational certificate. A *full semester. Sixteen credit hours.* MISS CONEY

78. ADVANCED HOME ECONOMICS EDUCATION.—A study of curriculum problems, budget, equipment, and classroom management. *Two hours a week. Two credit hours.* MISS CONEY

81 (82). INSTITUTIONAL FOODS.—Problems involved in the feeding of groups on a commercial basis, as menu planning, the application of food prep-

aration principles to large-quantity cookery, use of large-scale equipment, quality standards. A faculty dining room is operated as a laboratory for the course. Prerequisites, Courses 5 and 6. Classroom, *one hour a week;* laboratory, **six hours a week. Three credit hours.* Miss McCarthy

83 (84). Institutional Foods Management.—Management and administrative problems including personnel, equipment, and cost studies. Laboratory as in Course 81 (82) with emphasis on managerial responsibilities. Prerequisite, Course 81 (82). Classroom, *one hour a week;* laboratory, **six hours a week. Three credit hours.* Miss McCarthy

85. 86. School Lunch.—A study of the special institutional management problems of the school lunch. Laboratory practice in the planning, preparation, and serving of low-cost lunches. Lecture and laboratory, *arranged. One credit hour.* Miss McCarthy

101 (102). Advanced Nutrition.—Methods of research in nutrition and recent advances in the field. Prerequisite, Course 63. Offered if sufficient demand. *Two or three credit hours, as arranged.* Mrs. Sweetman

103 (104). Advanced Foods.—Methods of research in food preparation and recent advances in the field. Prerequisites, Course 6 and Biochemistry 5. Offered if sufficient demand. *Two or three credit hours, as arranged.* Mrs. Sweetman

HORTICULTURE

Professor Waring; Assistant Professor Clapp; Assistant Professor Riley

General Courses

2. General Horticulture.—An introductory treatment of practices and related principles basic to the production of fruits, vegetables, and flowers, and to ornamental horticulture. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Waring

4. Plant Propagation.—Methods of propagating plants. Current literature on propagation is reviewed. A report on methods applicable to a particular branch of horticulture is required. Given in 1937-38 and alternate years. †*Four hours a week. Two credit hours.* Mr. Clapp

11. 12. Problems in Horticulture.—Open to upperclass students who manifest special interest and the capacity for individual effort. The

consent of the instructor must be obtained in each case before registration. *Credit, arranged.* These courses may be repeated for credit.

MEMBERS OF THE DEPARTMENTAL STAFF

14. SUMMER PRACTICE.—Supervised practice in the gardens, greenhouses, nurseries, and orchards of the College. Short trips to specialized farms and florists' establishments may be included, and a trip of approximately four days' duration to inspect horticultural enterprises and estates in Maine and other New England states. Four weeks, close of spring emester, junior year. *Four credit hours.* MEMBERS OF THE DEPARTMENTAL STAFF

51. 52. SEMINAR.—Critical reviews of literature in selected or assigned horticultural subjects, preparation of abstracts and papers, classroom presentation and discussion. Staff members and invited guests participate. *One or two hours a week* by arrangement. *Credit, arranged.* MR. WARING

54. PLANT PROPAGATION.—A continuation of Course 4 into more advanced phases of the subject. Given in alternate years with Course 4. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.*

MR. CLAPP

Pomology

1. FRUIT HANDLING.—The commercial apple industry and its methods in Maine and competing regions, with minor attention to other tree fruits. Laboratory exercises include grading and packing and visits to commercial-scale orchards, packing houses, and storage plants. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. WARING

9. FRUIT JUDGING.—The selection of fruit, chiefly apples, for exhibition, the identification of varieties, and judging. The intensive training should ordinarily lead to participation in an intercollegiate apple-judging contest. Open to any interested student. **Six hours a week,* first nine weeks. *One credit hour.* MR. WARING

53. SYSTEMATIC POMOLOGY.—A survey of the species and important cultivated varieties of fruits and nuts, emphasizing botanical status as well as pomological classification, distribution, and use. Given in 1938-39 and alternate years. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. WARING

56. ADVANCED POMOLOGY.—An advanced treatment of principles and methods involved in the planting and management of orchards. Given in alternate years with Course 53. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. WARING

Vegetable Gardening

10. Small Fruits.—A consideration of varieties, cultural methods, and handling of such fruits as strawberries, grapes, raspberries, blackberries, and blueberries. *Three hours a week. Three credit hours.* Mr. Riley

20. Vegetable Gardening.—The best commercial practices; and the results of recent experimentation as applied to vegetable gardening. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Riley

21. Vegetable Crops.—Includes harvesting, marketing, storage, and systematic study of types and varieties of vegetables; also care of vegetables for seed production. Prerequisite, Course 20. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Riley

25. Vegetable Forcing.—Culture of vegetables under glass, types of greenhouses, special soil management problems involved, marketing. Prerequisite, Course 20. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Riley

Floriculture and Ornamental Horticulture

3. Trees and Shrubs.—The plant materials used in landscape gardening, emphasizing identification, nomenclature, and the characteristics upon which their special values for the purpose are based. Classroom, *one hour a week;* laboratory, **three hours a week. Two credit hours.* Mr. Clapp

5. Recreational Landscaping.—Materials and principles of landscape design with particular reference to recreational projects and roadside improvement. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Clapp

6. Landscape Gardening.—Principles of landscape design with particular reference to the home grounds. Observational trips to Bangor and Old Town may be required. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Clapp

7. Commercial Floriculture.—Principles underlying the production of flowers under glass; special consideration of methods for important cut-flower crops. One or more half-day trips in the Bangor area may be arranged. Prerequisite, Course 8. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Clapp

8. Home Floriculture.—The culture and care of garden flowers and house plants and the use of flowers in the home. Open to any student. Class-

room, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*
Mr. Clapp

15. Landscape Gardening.—A continuation of Course 6 treating the development of irregular-surfaced areas, the farmstead, and large tracts; the design of recreational areas; and the professional phases of landscape architecture. A one-day trip to Mt. Desert Island is required. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.*
Mr. Clapp

Graduate Courses

101. 102. Horticultural Investigations.—*Credit, arranged.*
Members of the Departmental Staff

103. 104. Research Methods.—Application of scientific method and equipment to the solution of horticultural problems and preparation of manuscript for publication. *Usually, as arranged, two credit hours.*
Mr. Waring

ALL DEPARTMENTS

Summer Projects.—A student in the College of Agriculture desiring to carry out a field project during the summer recess under faculty direction may obtain credit for such work providing arrangement is properly made with the major department concerned and the project is successfully carried through to completion. Project work may be conducted during the summer recesses between the sophomore and junior years, and junior and senior years. Sophomore-Junior Project is designated Pj 2 and limited to one hour credit. Junior-Senior Project is designated Pj 4 and may be one, two, or three hours credit. Complete details concerning project work may be obtained from heads of departments in which major curricula are offered.

TWO-YEAR COURSE IN AGRICULTURE

Director Loring

First-Year—Fall Semester

Animal Husbandry—Dairy Production.—A general survey of the field of dairy production and economic reasons for growth of the dairy indus-

try. Breeds of dairy cattle and their care, feed, and management. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*
Mr. Hall

Business Arithmetic.—A course in arithmetic based on the problems confronting the farmer in his business. *Two hours a week. Two credit hours.*
Mr. Loring

Farm Botany.—Plant structure and tissues in their relation to plant growth and development and to agricultural practices. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Steinbauer

Farm Chemistry.—A review of general chemistry; chemistry of plant and animal life as related to agriculture; fungicides and insecticides; gasoline and oil. *Two hours a week. Two credit hours.* Mr. Smith

Farm Crops.—Practices in growing crops under field conditions. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*
Mr. Raleigh

Forge Work.—Forging; welding; tool-steel work. **Three hours a week. One credit hour.* Mr. Davee

Fruit Handling.—Picking, packing, grading, storing, shipping, and marketing of fruit, particularly the apple. A survey is made of the principal apple producing regions and of the general status of the industry. A small amount of systematic study of fruits and some fruit judging are included. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Riley

Potato Production.—Consideration of the principles and practices involved in the production of potatoes under Maine conditions. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Libby

Poultry Husbandry.—Origin and development of types, breeds, and varieties of poultry; care, feed, and management; housing, breeding, incubation and brooding; and marketing poultry products. Laboratory practice in judging poultry and eggs, and in grading and packing eggs. Killing, picking, and packing poultry. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Gardner

First Year—Spring Semester

Carpentry.—Graded exercises in woodworking designed to familiarize the student with tools used in modern woodworking practice and to give him experience in working from dimensioned drawings. †*Four hours a week. Two credit hours.* Mr. Swift

Dairy Husbandry—General Dairying.—Milk secretion and composition; testing of milk and milk products; sanitary production and handling of milk from farm to consumer; cream separation; and buttermaking. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Smith

English.—Part of the time is devoted to a review of grammar and to the principles of effective writing, with attention also to spelling and punctuation. Weekly papers, chiefly expository, are required. *Two hours a week. Two credit hours.* English Department

Farm Economics.—An elementary course in the principles of economics as applied to agriculture. The following subjects are considered: development of commercial agriculture, price making forces, production, land policies, farm credit, tariff, taxation, and agricultural organization. *Two hours a week. Two credit hours.* Mr. Niedererank

Fruit Growing.—Principles and practices which should be followed in choosing an orchard site, and in the subsequent planting and culture, pest control, and other care leading to the production of profitable crops. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Riley

Poultry Husbandry.—A continuation of the course given in the fall semester. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Gardner

Soils and Fertilizers.—Properties, management, and fertilization of soils in relation to fitting them for production of crops. Classroom, *three hours a week;* laboratory, **three hours a week. Four credit hours.* Mr. Chucka

Second Year—Fall Semester

Animal Husbandry—General Animal Husbandry.—Breeds, and care, feed, and management of horses, beef cattle, sheep, and swine. Laboratory work in judging horses, sheep, and swine. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Hall

Animal Husbandry—Common Diseases of Farm Animals.—A general course including anatomy, physiology, hygiene, and sanitation. Methods for the prevention and control of the common diseases of domestic animals are given special attention. *Three hours a week. Three credit hours.* Mr. Witter

English.—Instruction in practical uses of English, including business correspondence, with as much review of grammar as seems necessary. *Two hours a week. Two credit hours.* English Department

FARM ENGINEERING AND MECHANICS.—Running farm lines, laying out drainage systems, and planning farm buildings and conveniences. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. SWIFT

FARM INSECTS.—A practical study of insects in their economic relationships to farm plants and farm animals. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* MR. DIRKS

FARM MANAGEMENT.—Factors that affect the profitable operation of the farm as a business unit including size of business; labor efficiency; crop rotation; farm layout, and production costs. Individual farming systems are studied. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. JONES

POULTRY HUSBANDRY—POULTRY MANAGEMENT.—A general consideration of poultry management with especial reference to sanitation and disease. *Two hours a week. Two credit hours.* MR. GARDNER

VEGETABLE GROWING.—Production of vegetables for home use. Important commercial vegetables of New England. Handling of forcers, growing of seedlings, marketing, and other topics are included in as much detail as time will permit. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

Second Year—Spring Semester

ANIMAL HUSBANDRY—FEEDING LIVE STOCK.—General principles underlying feeding of live stock; composition and characteristics of feed stuffs; calculating rations; and the best practices in feeding farm animals. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.* MR. HALL

ENGLISH.—A continuation, including reports, abstracts, and oral composition based on agricultural material. *Two hours a week. Two credit hours.* ENGLISH DEPARTMENT

FARM CROPS.—Grass and forage plants, their culture and uses. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. RALEIGH

FARM MACHINERY.—A course given to acquaint the student with the machinery adapted to farm use. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. SWIFT

MARKETING FARM PRODUCTS.—A course dealing with the economic problems in marketing farm products, with particular attention given to marketing

Maine products, such as dairy and poultry products, apples, and potatoes. Time is also given to a study of the principles and methods of coöperative marketing. *Three hours a week. Three credit hours.* MR. NIEDERFRANK

FORESTRY.—The general principles of forestry with special reference and application to the farm woodlands, particularly in this region. Lectures and textbook work in elementary systems of cutting, estimating, protection, and reforestation. *Two hours a week. Two credit hours.* MR. CHAPMAN

SMALL FRUIT CULTURE AND PLANT PROPAGATION.—Strawberries, raspberries, blackberries, blueberries, cranberries, grapes, and some other fruits of minor importance in the Stae. Production and disposal of the crops are considered. Instruction is given in general propagation of plants. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

HONORS COURSE

Attention is called to the tutorial honors course which is open to superior students in agriculture and forestry who may desire to supplement their field of concentration by study under individual tutorial guidance. A fuller description of this course is to be found at the beginning of the section, General Courses.

College of Arts and Sciences

PURPOSE

In an age which stresses the utilitarian and so-called practical interests of education, the College of Arts and Sciences reasserts its cultural objectives, its efforts to preserve the best that the past has bequeathed us, and its attempts to enrich and enhance human living. Our time calls preëminently for men and women of critical intelligence, broad and sympathetic understanding of human needs, and determination of purpose. The College of Arts and Sciences seeks, therefore, to train and inspire loyal and competent citizens to meet the demands of the present, and to enrich, within the limits of their ability and opportunity, the life of their respective communities.

In addition to the obvious value of the social sciences in meeting contemporary needs, the College recognizes as indispensable the disinterested pursuit of knowledge and the free play of the mind in the region of literature and the other arts. It believes that no adequate and enduring human progress can be achieved if any essential part of human nature remains undeveloped.

Specifically, the College of Arts and Sciences conceives its task in terms of the particular needs of the various classes of students whose interests it seeks to serve. It offers, for example, a specific curriculum to those who contemplate entering the professional schools of medicine, dentistry, law, government, business, social work, and the arts. In collaboration with the School of Education, it offers specific training to prospective teachers.

In all cases, however, the College aims both at the production of useful skills and techniques and at the training of men and women who may be able and willing to turn their training toward socially desirable ends.

ADMISSION

The requirements for admission are given in full elsewhere in the catalog. They are practically the same as for other New England colleges and may be met by a four-year preparatory course in a good high school or academy. Graduates of Maine normal schools who are also graduates of an approved high school will receive sophomore standing.

The regular admission requirements will be applied to all students who enter with advanced standing. Students must make up all entrance requirements before registering as juniors. Those who transfer from other colleges must make them up within a year.

GRADUATION REQUIREMENTS

The work in the College of Arts and Sciences leads to the degree of Bachelor of Arts (B.A.). All curricula, beginning with the Class of 1940, require the completion of 120 hours exclusive of military training. For students entering before September, 1936, the requirement is 125 hours including military training.

Every candidate for the Bachelor of Arts degree is required to complete a basic course in English, in social science, and in mathematics and natural science. He is also required to elect a foreign language until he has passed a reading test satisfactorily. Seven hours of Military Science are required of all men students. All women students in the college take in their freshman year Elementary Hygiene, for which two credits are given. This work may not be counted toward the fulfillment of the science requirement. In addition, two years' work in Physical Training is required of all students without credit.

Eighteen to twenty-four hours must be completed in the major field during the last two years. Ninety-five of the hours required for graduation and three fourths of the major work must be completed with a grade of C or above. If a student transfers from another institution, three fourths of all work done after transferring must be passed with a grade of C or better. Grades below C are not accepted from other institutions.

Students who transfer to this college as sophomores from another college of the University must complete one fourth of the total hours required in the college from which they transferred plus 94 in the College of Arts and Sciences (90 hours for the class of 1940 and succeeding classes); juniors must complete one half of the total hours, plus 63 (60 hours for the class of 1940 and succeeding classes); and seniors three fourths of the total hours, plus 32 (30 hours for the class of 1940 and succeeding classes). They must also have a total of 95 hours of C grade or better. They will be required to do two full years' work in the College of Arts and Sciences before receiving the bachelor's degree, with the exception that students from the College of Technology may transfer after the junior year and be graduated in Arts and Sciences after one year's work as major students in the Departments of Physics, Chemistry, or Mathematics; and students from the College of Agriculture may similarly transfer and be graduated as majors in the Department of Zoology.

FOREIGN LANGUAGE

Every student in the College of Arts and Sciences is required before graduating to demonstrate that he has mastered one foreign language well

enough to be able to read and understand it with some ease. It is recommended that the student, unless he has special reasons, continue with a language which he has already studied in high school. If he has settled upon his major subject when he enters the University, he should ascertain the specific language preference in that field. Students entering with three years of French or four years of Latin normally meet the requirement by completing an additional year in either of these languages. In general, whatever the choice, it is expected that the requirement will be met before the beginning of the third year. Courses in language should be taken continuously until the examination has been passed.

Reading Tests in Romance Languages

1. For most students a reasonable preparation for taking a reading test in a Romance language shall be considered to be four years of work in high school or two years of work in college or the equivalent.

2. Students are not ordinarily expected to apply for a reading test more than twice in one year.

3. A reading test shall be given regularly early in January and early in May before the winter and spring registrations respectively.

4. In addition, a reading test shall be given the first Wednesday evening after upperclass registration especially for the following classes of students:

a. Transfer students from Westbrook and other institutions who have not taken such a test previously.

b. University of Maine students previously in residence who for some reason did not take the May test or who, having failed it, have made further preparation.

c. Freshmen, wishing to be examined in French, (1) who have done more than three years of high-school work in the language, (2) who are of French-Canadian stock or have lived at some time in a French environment, (3) who can show evidence of having privately read to a considerable extent books and periodicals outside of those required in the course, (4) or who have unusual scholastic records and wish to be exempted from a language course to have their program free for other work.

d. Freshmen, wishing to be examined in Spanish, whose previous record based on study and environment is deemed adequate by the Department.

THE FIRST TWO YEARS

The first two years of the student's college course constitute a unified period. On the one hand, they are in a very real sense a continuation of his preparatory school training and have the same general purpose of providing him some familiarity with the general streams of human knowledge, a broad and firm foundation of culture, and an adequate background for an understanding and appreciation of the needs of his community as well as competence to participate intelligently in its varied life. On the other hand, the first two years reach out toward the period of concentration with which the last two years are primarily occupied. They are designed to help the student to see his chosen field in perspective, but they also seek to give him the necessary preparation for undertaking the studies of a distinctly advanced nature. In brief the first two years are definitely exploratory. Their objective is dispersion rather than concentration, intelligence over an extended area of knowledge rather than proficiency in one particular region.

With these general principles in mind, freshmen are advised to elect courses from each of the following groups:

I. English. English 1 and English 2 or 18 are definitely required unless the student is admitted by the department to a more advanced course.

II. Foreign Language: Greek, Latin, French, Spanish, German. Students who pass a reading test in a foreign language may be excused from this requirement.

III. Social Studies: American History, Ancient Civilization, European History, and Social Science 1;2. Students who do not wish to take further work in History may satisfy the social science requirement for the degree in the sophomore year by taking a basic course in Economics, Government, or Sociology.

IV. Natural Science and Mathematics: The requirements in this division may be satisfied by electing Chemistry 1, 2; Geology 13, 14; Mathematics 1, 3, 6, or 1, 2, 3, or 17, 18, 19, 20, or 3, 17, 18, or 3, 19, 20, or 23-24, or Course 1 in Mathematics and Courses 15, 16 in Astronomy, or Courses 1, 3 in Mathematics and Astronomy 10; Physics 1, 2; Physics 3 and Astronomy 10; Zoology 1 and Botany 2, or Zoology 3, 4.

Military Science and Physical Training are required of all men unless they are physically disqualified. Physical Education and Hygiene must be taken by all women. For those students taking Military Science or Hygiene the maximum registration is fifteen hours *exclusive* of these two subjects; for others the maximum registration is sixteen hours. Individual guidance is given to all freshmen in the selection of their courses.

During the sophomore year the student continues his general interest in

exploration, but he naturally becomes more definitely concerned over the selection of his major subject. He should, therefore, add at least two new major fields of learning to those taken during the freshman year. This should insure for him some likelihood of a wise decision regarding his field of concentration because he will have had some experience in at least six different fields. Not more than six hours may normally be taken in one subject in either semester of the sophomore year. At the same time it is frequently wise to take more than one course in a prospective major subject, in order to test one's actual interest and to satisfy preliminary requirements for advanced work.

During the first two years a student must show evidence of ability to pursue upper-division courses successfully. Work of C grade or above will be interpreted as satisfactory. *Students with records consistently below this standard will be advised to withdraw from the University at the end of their sophomore year.*

Throughout the freshman and sophomore years the student is under the general supervision of the Dean of the College.

THE LAST TWO YEARS

At some time during the second semester of the sophomore year, the student, in conference with the Dean, selects his major subject or field of chief academic interest, and outlines with his major adviser a tentative curriculum for his two remaining years. This special field is chosen without reference to departmental boundaries, though it may coincide with some department or special curriculum in the College. The department in which the major subject chiefly falls becomes for administrative purposes the student's major department, and the head of that department is his major instructor. The latter is responsible for the student before the faculty and must approve the student's registration.

At the same time the student selects his major adviser. This is regularly either the major instructor or another member of the department whom he and the student agree upon, subject to the approval of the dean. Besides assisting the student in outlining his curriculum, the major adviser also directs his pursuit of it, recommends or approves all changes made in it, and acts as the student's registering officer.

The major curriculum is the nucleus of related courses selected by the student as representing his chief field of interest or major subject. It is restricted to a maximum of twenty-four and a minimum of eighteen hours in the junior and senior years, but it is expected that the remaining courses

will be chosen with reference to their affinity with it, except as certain otherwise unrelated courses are recognized as desirable for all students on account of their cultural or practical value. No elementary or introductory courses may be included in the major curriculum, though such exploratory courses may be taken, with the major adviser's approval. In general it is assumed that upperclass students will be engaging themselves with courses of an advanced nature which will toughen their intellectual fibre and furnish a real test of their abilities.

Seniors shall be required to continue work in their major subject through their senior year.

COMPREHENSIVE EXAMINATIONS

In the spring semester of the senior year major students in some departments take a comprehensive examination in their major subject. The purpose of this examination is to provide the student with an opportunity to demonstrate his knowledge of the salient features of his general field of study. It aims to make clear the unity of the field as a whole. It seeks definitely to counteract the easy tendency to separate courses from one another. It is, therefore, designed in such a way as to develop perspective and to encourage organization of materials as well as accuracy and range of knowledge. The student is thus able to evaluate his ability in the field of his major interest and to make a smooth transition to his professional and graduate work.

HONORS PROGRAM

A program of Honors Work for the benefit of the superior student has been adopted by the College of Arts and Sciences. The purpose is to encourage exceptional ability by affording unusual opportunities for the exercise of that ability and by rewarding high achievement with appropriate distinction. The opportunities are intended especially to stimulate originality, intellectual curiosity, and resourcefulness, and they require a large measure of self-reliance. The Honors courses do not involve the attending of classes, but are conducted by the tutorial method, according to which the student does his work under the supervision of a tutor, whom he meets in conference at regular intervals for advice and informal discussion. The rewarding distinction, which is the highest offered by the College of Arts and Sciences, is conferred upon the successful completion of all or a sufficient part of the Honors program, in the form of graduation Honors, which are of three grades: Honors, High Honors, Highest Honors.

Application for admission to any course in the Honors program should be made to the Dean of the College of Arts and Sciences. As a rule, a general average of B in the whole of the applicant's previous record will be required for admission, but each applicant will be judged according to his individual merit, especially as regards his possession of the particular qualities, such as initiative and self-reliance, which are deemed essential to success in Honors work.

The Honors program is divided into two parts: (1) Preparation for Honors Work, in the freshman and sophomore years, and (2) Honors Work, in the junior and senior years. Descriptions of the Honors Courses will be found on page 199.

PROFESSIONAL CERTIFICATES FOR TEACHERS

The Professional Secondary Certificate is granted for a period of two years to graduates of the College who have completed not less than eighteen semester hours in education, not more than six semester hours of which may be in the field of psychology. Courses recommended for satisfaction of this requirement are as follows: General Psychology, History of Education, Educational Measurements, Methods of Teaching in Secondary Schools, and Principles of Secondary Education or Practice Teaching. In addition, candidates are expected to complete a major and at least one minor teaching subject. Usual combinations are mathematics and science, French and Latin, English and history, English and French, history and Latin, English and Latin, and French and history. To be satisfactory, all of these required courses, both academic and professional, must be completed with a grade of C or better.

BANGOR THEOLOGICAL SEMINARY

Students in the College of Arts and Sciences have the privilege of registering for courses in Bangor Theological Seminary not to exceed five credit hours per semester, without payment of tuition charges, and a like privilege is extended by the College to students in the Seminary. The courses for which students may register must be approved by the Dean of the College, the President of the Seminary, and the instructor in the subjects concerned in both institutions. Such work may be counted toward graduation; but in order to avoid duplication of credits it is understood that all courses at the University of Maine which have been used by Seminary students for gradua-

tion credit at the Seminary shall be cancelled at the University in case the student is admitted to junior standing as a candidate for the Bachelor of Arts degree.

SUMMER SESSION

Before students of the College of Arts and Sciences pursue Summer Session courses in any institution other than the University, they must gain the approval of the Dean in writing. A marked bulletin of the institution should be left at the Dean's office with a note requesting degree credit for the selected courses.

SPECIMEN CURRICULA

The following outlines of specimen curricula will provide the student with a general idea of the character of preparation recommended for various professions. They are suggestive and tentative rather than fixed or prescribed. The student's own interests and aptitudes will naturally determine to some extent his choice of subjects. Though only a few of the more important curricula in the College of Arts and Sciences are here given, there are a large number of others which may be procured by writing to the Dean of the College.

Specimen Major Curriculum for Premedical Studies

FRESHMAN YEAR

Fall Semester			Hrs.	*Spring Semester*			Hrs.
Eh	1	English	3	Eh	2	English	3
*Gm	1	German	4	*Gm	2	German	4
Mt	1	Military Training	1½	Mt	2	Military Training	1½
Pt	1	Physical Education	—	Pt	2	Physical Education	—
†Zo	3	Animal Biology	4	†Zo	4	Animal Biology	4
		Elective in Social Science	3			Elective in Social Science	3

* Two years of a modern foreign language, preferably German, are usually required for medical school admission, and should lead to a reading knowledge of the subject.

† Candidates who plan to enter medical school in two years and those who have a special interest in chemistry should take General Chemistry

during the first year, with or without General Zoology. To fulfill the requirements of the American Medical Association, Organic Chemistry and Physics must be taken the second year. These, together with Comparative Anatomy or General Zoology, if the latter was not taken the first year, make a very heavy program. A four-year program leading to a B.A. degree is thus desirable and in most cases necessary. Candidates for admission to medical school should therefore be familiar with the requirements of several medical schools before planning their first-year program.

SOPHOMORE YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Ch 1a General Chemistry	4	Ch 2a General Chemistry	4
Gm 3 German	3	Gm 4 German (‡Gm 16, Scientific German)	3-2
Ms 1, 3 Trigonometry, College Algebra (or an approved elective)	4	Ms 6 Analytic Geometry (or an approved elective)	4
Mt 3 Military Training	2	Mt 4 Military Training	2
Pt 3 Physical Education	—	Pt 4 Physical Education	—
Zo 15 Comparative Anatomy	4	Zo 16 Comparative Anatomy	4

JUNIOR YEAR

	Hrs.		Hrs.
Ch 51 Organic Chemistry	5	Ch 52 Organic Chemistry	5
Eh 3 History of English Literature (or Eh 7 or an approved elective)	3	Eh 4 History of English Literature (or Eh 8a or an approved elective)	3
Ps 1a General Physics	4	Ps 2a General Physics	4
Py 1 General Psychology	3	Py 2 General Psychology	3

SENIOR YEAR

	Hrs.		Hrs.
Bt 45 Genetics (or Social Science)	3	Ch 40 Quantitative Analysis	4
Ch 31 Qualitative Analysis	5	Elective (preferably Social Science)	3-5
Zo 37 Physiology	4	Zo 18 Vertebrate Embryology	4
Zo 41 Histology	3	Zo 38 Physiology	4

‡ With the permission of the German Department.

Specimen Major Curriculum for Pre-Legal Studies

FRESHMAN YEAR

Fall Semester		Hrs.	*Spring Semester*		Hrs.
Eh 1	Freshman Composition	3	Eh 2	Freshman Composition	3
Hy 3	United States History	3	Hy 4	United States History	3
Mt 1	Military Training	1½	Mt 2	Military Training	1½
Pb 1	Public Speaking	2	Pb 6	Persuasive Speech	2
Pt 1	Physical Education	—	Pt 2	Physical Education	—
	*Foreign Language	3-4		*Foreign Language	3-4
	Natural Science	4		Natural Science	4

SOPHOMORE YEAR

		Hrs.			Hrs.
Eh 7	Second-Year Composition	3	Eh 8a	Second-Year Composition	3
Es 1a	Principles of Economics	3	Es 2a	Principles of Economics	3
Gt 31	American Government	3	Gt 32	American Government	3
Mt 3	Military Training	2	Mt 4	Military Training	2
Pt 3	Physical Education	—	Pt 4	Physical Education	—
Py 1	Psychology	3	Py 2	Psychology	3
	Elective	3-4		Elective	3-4

JUNIOR YEAR

		Hrs.			Hrs.
Ba 9	Accounting	3	Ba 10	Accounting	3
Eh 3	History of English Literature	3	Eh 4	History of English Literature	3
Gt 83	American Constitution	3	Gt 84	American Constitution	3
Hy 17	History of England	3	Hy 18	History of England	3
Sy 1	Principles of Sociology	3	Sy 2	Principles of Sociology	3

* To be continued until the student has passed his reading test.

SENIOR YEAR

Fall Semester

		Hrs.
Ba 51	Corporation Finance (or Ba 53, Money and Banking)	3
Es 71	Public Finance	3
Gt 51	Public Administration	3
Pb 3	Debating	2
Py 75	Social Psychology	3
	Electives: Gt 73, Pl 3, Py 71, Sy 61	3

Spring Semester

		Hrs.
Ba 54	Investments and Investment Banking	3
Es 52	Social Control of Industry	3
Es 72	Labor Problems	3
Gt 52	Public Administration	3
	Electives: Gt 74, Pl 4, Pl 10, Py 72, Sy 62	3

Curriculum in Journalism

FRESHMAN YEAR

		Hrs.
Eh 1	Freshman Composition (or Eh 11, Freshman Literature and Composition)	3
Hy 5	Survey of Western Europe (or Hy 3, United States History)	3
	Foreign language	3-4
Mt 1	Military Training (Zo 5, Hygiene, women)	1½-2
	Natural Science or Mathematics	4
Pt 1	Physical Education	—

		Hrs.
Eh 2	Freshman Composition (or Eh 12 or 18, Freshman Literature and Composition or Freshman Literature)	3
Hy 6	Survey of Western Europe (or Hy 4, United States History)	3
	Foreign language	3-4
Mt 2	Military Training or elective	1½-2
	Natural Science or Mathematics	4
Pt 2	Physical Education	—

SOPHOMORE YEAR

Fall Semester		Hrs.	*Spring Semester*		Hrs.
Eh 3	History of English Literature (or Eh 43, Chief Writers of America for Eh 11 students)	3	Eh 4	History of English Literature (or Eh 44, Chief Writers of America for Eh 12 students)	3
Eh 23	Newswriting	3	Eh 24	Newswriting	3
Gt 31	American Government	3	Gt 32	American Government	3
Hy 3	or Hy 5, American or European History	3	Hy 4	or Hy 6, American or European History	3
Mt 3	Military Training	2	Mt 4	Military Training	2
Pl 3	Philosophy (or foreign language)	3	Pl 4	Philosophy (or foreign language)	3

JUNIOR YEAR

		Hrs.			Hrs.
Eh 27	The Newspaper in the 20th Century	3	Eh 28	Departmental or Feature Writing	2
Eh 45	Contemporary American Literature	3	Eh 46	Contemporary European Literature	3
Es 1a	Principles of Economics	3	Es 1a	Principles of Economics	3
Gt 33	Municipal Government and Administration	3	Gt 36	European Government	3
Hy 67	American Diplomacy	3	Hy 68	American Diplomacy	3

SENIOR YEAR

		Hrs.			Hrs.
Eh 31	The Newspaper as a Factor in International Relations	3	Eh 30	The Country Newspaper	3
Eh 57	Shakespeare	3	Eh 58	Shakespeare	3
Gt 73	International Relations	3	Gt 74	International Relations	3
Es	55, 69, 71, or 53	3	Es	54, 56, 72, or 60	3
	Electives	3		Electives	3

Specimen Major Curriculum for Business Administration*

FRESHMAN YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Eh 1 Freshman Composition	3	Eh 2 Freshman Composition	3
Hy 5 Survey of Western Europe	3	Hy 6 Survey of Western Europe	3
Ms 1, 3, Trigonometry and College Algebra (or Ch 1a, General Chemistry; Ps 1a, General Physics; Zo 3, Animal Biology)	4	Ms 6 Analytic Geometry (or Ch 2a, General Chemistry; Ps 2a, General Physics; Zo 4, Animal Biology)	4
Mt 1 Military Training	1½	Mt 2 Military Training	1½
Pt 1 Physical Training	—	Pt 2 Physical Training	—
† Foreign Language	4	† Foreign Language	4

SOPHOMORE YEAR

	Hrs.		Hrs.
Ba 9 Accounting	3	Ba 10 Accounting	3
Eh 7 Second-Year Composition	3	Eh 8a Second-Year Composition	3
Es 1a Principles of Economics	3	Es 2a Principles of Economics	3
Mt 3 Military Training	1½	Mt 4 Military Training	1½
Pb 1 Public Speaking	2	Pb 6 Persuasive Speech	2
Pt 3 Physical Training	—	Pt 3 Physical Training	—
Py 1 General Psychology	3	Py 2 General Psychology	3

* For further information concerning requirements and courses in Business Administration see p. 182.

† To be continued until the student has passed his reading test.

JUNIOR YEAR

Fall Semester

	Hrs.
Ba 51 Corporation Finance	3
Ba 53 Money and Banking	3
Gt 31 American Government	3
Hy 59 Economic and Social History of the United States	3
Ms 19 Statistics	2
Elective: Py 75, Social Psychology; Sy 1, Principles of Sociology	3

Spring Semester

	Hrs.
Ba 54 Investments and Investments Banking (or Es 64 International Trade and Finance)	3
Es 52 Social Control of Industry	3
Gt 32 American Government	3
Hy 60 Economic and Social History of the United States	3
Ms 20 Statistics	2
Elective: Hy 21, Current World Problems; Py 12, Advertising; Sy 2, Principles of Sociology	2-3

SENIOR YEAR

	Hrs.
Ba 55 Business Law	3
Es 61 Business Cycles	2
Es 71 Public Finance	3
Gt 51 Public Administration	3
Ms 17 Mathematical Theory of Investment	2
Elective: Ba 57, Trust and Corporation Policies; Sy 61, Social Pathology	3

	Hrs.
Ba 56 Business Law	3
Ba 58 Business Management and Policy (or Es 64, International Trade and Finance)	3
Ba 96 Seminar	2
Gt 52 Public Administration	3
Ms 18 Mathematical Theory of Investment	2
Elective: Es 72, Labor Problems; Es 76, Public Utilities; Es 92, Advanced Economic Theory	2-3

Specimen Major Curriculum for Pre-Professional Training for Social Work

FRESHMAN YEAR

Fall Semester		Hrs.	*Spring Semester*		Hrs.
Eh 1	Freshman Composition	3	Eh 2	Freshman Composition	3
	Foreign language	3-4		Foreign language	3-4
Hy 5	Survey of Western Europe	3	Hy 6	Survey of Western Europe	3
Mt 1	Military Training	1½	Mt 2	Military Training	1½
Pe 1	Physical Education	—	Pe 2	Physical Education	—
Zo 3	Animal Biology	4	Zo 4	Animal Biology	4
Zo 5	Hygiene (girls)	2	Pb 2	Public Speaking	2

SOPHOMORE YEAR

		Hrs.			Hrs.
Eh 7	Second-Year Composition	3	Eh 8a	Second-Yr. Composition	3
Es 1a	Principles of Economics	3	Es 2a	Principles of Economics	3
Gt 31	American Government	3	Gt 32	American Government	3
Mt 3	Military Training	1½	Mt 4	Military Training	1½
Pe 3	Physical Education	—	Pe 4	Physical Education	—
Py 1	General Psychology	3	Py 2	General Psychology	3
Sy 1	Principles of Sociology	3	Sy 2	Principles of Sociology	3
	*Foreign language			*Foreign language	

JUNIOR YEAR

		Hrs.			Hrs.
Eh 3	History of English Literature	3	Eh 4	History of English Literature	3
Gt 33	Municipal Government and Administration	3	Es 72	Labor Problems	3
Mc 3	Music Appreciation	2	Mc 4	Music Appreciation	2
Pl 3	History of Philosophy (or Py 75, Social Psychology)	3	Pl 4	History of Philosophy	3
Sy 61	Social Pathology	3	Sy 20	Intro. to the Field of Social Work	3
Sy 81	Marriage and Family	3	Sy 62	Criminology	3

* To be continued until the student has passed his language test.

SENIOR YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Es 71 Public Finance	3	Es 52 Social Control of Industry	3
Gt 51 Public Administration	3	Gt 52 Public Administration	3
He 25 Economics of the Household	4	He 26 The Child in the Home	3
Py 71 Abnormal Psychology	3	Py 72 Mental Hygiene	3
Sy 87 Social Evolution and Social Change	2	Sy 88 Population and Race	2
Sy 95 Sociology	2	Sy 96 Sociology Seminar	2

Specimen Curriculum for Majors in Chemistry

FIRST YEAR

	Hrs.		Hrs.
Ch 1b General Chemistry	4	Ch 2b General Chemistry	4
Eh 1 Freshman Composition	3	Eh 2 Freshman Composition	3
Gm 19 German for Chemists	3	Gm 20 German for Chemists	3
Ms 1-3 Trigonometry and College Algebra or Ms 11, Freshman Mathematics	4	Ms 6 Analytic Geometry or Ms 12, Freshman Mathematics	4
Mt 1 Military	1½	Mt 2 Military	1½
Pt 1 Physical Training	—	Pt 2 Physical Training	—

(Select a registration of 16-17 hours from the courses listed for the second, third, and fourth years)

SECOND YEAR

Ch 21 Intro. Theor. Chemistry	2	Ch 22 Intro. Theor. Chemistry	2
Gm 21 German for Chemists	3	Gm 22 German for Chemists	3
Ms 7 Differential Calculus*	5	Ms 8 Int. Calculus*	5
Py 1 General Psychology†	3	Py 2 General Psychology†	3
Es 1 Principles of Economics‡	3	Es 2 Principles of Economics‡	3
Sy 1 Principles of Sociology‡	3	Sy 2 Principles of Sociology‡	3
Pb 1 Public Speaking	2	(Elective)	2-3
Mt 3 Military	2	Mt 4 Military	2
Pt 3 Physical Training	—	Pt 4 Physical Training	—

THIRD YEAR

Fall Semester			*Spring Semester*		
Ch 31	Qualitative Analysis	5	Ch 40	Quantitative Analysis	4
Ps 1	General Physics*	5	Ps 2	General Physics*	5
Ed 51	History of Ed. in U.S.†	3	Eh	Technical Composition*	2
Ed 59	Principles of Secondary Ed.†	3	Ed 78	Prin. and Methods of Teach. in Sec. Schools†	3
Es 9	Accounting‡	3	Py 66	Educational Psychology†	3
Es 51	Corporation Finance‡	3	Es 10	Accounting‡	3
	Elective	3	Es 72	Labor Problems‡	3

FOURTH YEAR

Ch 51	Organic Chemistry	5	Ch 52	Organic Chemistry	5
Ch 85	Seminar	1	Ch 86	Seminar	1
Ch	Elective	1	Ch	Elective	2
Ps 17	Intermediate Physics*	3	Ps 18	Intermediate Physics*	3
Ed 65	Educational Measurements†	3	Es	Elected‡	3
Ch 97	Methods Teach. Chemistry†	2	Sy	Elected‡	3
Ed 29	Practice Teaching‡	3		Elective	
Sy	Elected‡	3			
Es	Elected‡	3			
	Elective	3			

* Preparation for graduate study.
† Teacher training.
‡ Commercial option.
All chemistry courses required.

Courses of Instruction

Courses designated by an odd number are given in the fall semester; those designated by an even number, in the spring semester.

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are primarily for upperclassmen and graduates; courses numbered above 100 are primarily for graduates.

When a course is offered in the first semester and also repeated in the second, it is designated by two numbers, the second of which is in parenthesis [e.g., 1 (2)].

When a dash is used between the two numbers (e.g., 1-2), both semesters must be taken to obtain credit; when a semi-colon is used (e.g., 1;2), the first semester may be taken by itself, but the second cannot be taken unless the first semester is taken previously; when a period is used (e.g., 1.2), either semester may be taken for credit.

INTRODUCTION TO THE CURRICULUM

The tabular arrangement of courses given on the following page serves to give the student a general view of the academic organization of the College of Arts and Sciences. All graphic representations are to some extent arbitrary and misleading, yet our tabulation may help the student to observe the general outline of academic interests in the College as well as something of the affinity which the various subjects bear to one another. It is obvious at once, for example, that languages and literature belong to one group, but one gains some realization of the inter-relationship of languages and the scope of linguistic study by noting how the ancient languages are followed by the modern languages and these in turn by Comparative Literature and English with its various applications. The importance of arrangement is equally great, if not so readily apparent, in the case of the other divisions. Growing familiarity with these fields will make it increasingly clear that one subject by its very nature passes inevitably into another. The entering student will do well to study this table in making his first general acquaintance with the curriculum as a whole. The upperclassman will occasionally wish to view his education in a perspective beyond that of his own previous academic experience. It is hoped that this table will act sometimes as a corrective for too specialized training, sometimes as a visual demonstration of the essential unity of all knowledge, sometimes as a device for calling attention to intimate cultural and intellectual relationships.

ARRANGEMENT OF SUBJECTS IN GROUPS

ART HISTORY

Professor Huddilston

1. 2. Masterpieces of Art.—A general course covering the most distinctive values of art in the great periods, with special regard to architecture as a key to the spirit of the ages. Lectures and interpretations in the art gallery. Not open to students who have taken Course 3 or 5. *Three hours a week.*

3. Renaissance Art.—A study of some of the important Florentine and Venetian masters; the work is pursued not only for the art history but also for the broader values of the birth of the modern world. Lectures and reports based on a study of photographs. Given in 1938-39 and alternate years. *Two hours a week.*

4. Art in America.—A course of lectures on the relation of the fine arts to national culture and spirit. Designed to throw light on the cultural history of the United States and to stimulate a broader interest in art appreciation particularly as affecting the public mind and reflecting the national spirit. Open to all students except freshmen. *Two hours a week.*

5. Greek Art.—An intimate examination of the principles of Greek architecture and sculpture with a view to understanding the technique and achievements of the Greeks. Lectures and study in the collection of photographs and in the art gallery. Given in 1937-38 and alternate years. *Two hours a week.*

7. Chinese Culture.—A general survey of ancient China's intellectual and aesthetic ideals as reflected in her philosophy, painting, and pottery. Not open to freshmen. Given in 1937-38 and alternate years. *Three hours a week.*

ASTRONOMY

Professor Willard; Associate Professor Jordan; Mr. Lamoreau

The courses in astronomy aim to meet the demands of students seeking a knowledge of the subject for purposes of general culture, and for technical or professional uses. Opportunity is offered for students to acquire such information as will enable them to appreciate more fully the universe in which they live. Courses may be selected which provide instruction in instrumental astronomy and observatory practice.

10. Descriptive Astronomy.—An elementary course. The textbook is supplemented by informal lectures, illustrated by lantern slides, drawings of celestial objects, and work in the observatory. Open to all students. *Three hours a week.* Mr. Jordan

11. Practical Astronomy.—A course arranged to meet the needs of engineering students, and consisting mainly of problems in the conversion of time, the determination of terrestrial latitudes, and the establishment of meridian lines. Open to students who have taken Mathematics 1 and 3. *Two hours a week* with additional hours for observation. Mr. Jordan

14. Navigation.—An elementary course dealing primarily with the determination of the position of a ship at sea. The material discussed in the course forms the basis of airplane navigation during long flights. Open to students who have a working knowledge of Trigonometry. *Two hours a week.* Mr. Jordan

15; 16. General Astronomy.—Designed for students in mathematics and physics and others wishing a more complete treatment of the subject than is possible in Course 10. Recitations, lectures, solution of problems, observations with instruments in the observatory. Open to sophomores, juniors, and seniors who have had Mathematics 1. Given in 1937-38 and alternate years. *Three hours a week.* Mr. Jordan

59; 60. Practical Astronomy.—The theory and use of the astronomical transit, zenith telescope, and equatorial; accurate determination of time and latitude. Open to students who have taken Mathematics 6, 7, 8, and Astronomy 10 or 15. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Jordan

BIBLICAL LITERATURE

Professor Huddilston

Bb 1. The Origin and Growth of the Old Testament.—A brief survey intended to help the student to an understanding of the human side of the Old Testament. Lectures; open to all students. *Two hours a week.*

CHEMISTRY

Professor Bradt; Professor Brautlecht; Professor Brann; Associate Professor Jenness; Assistant Professor Otto; Assistant Professor Gilliland; Mr. Osborn; Mr. Bogan; Mr. Tomlin; Mr. Martin; Mr. Filachione

The Department of Chemistry opens to the general student of the liberal arts one of the principal avenues of approach to the understanding of Nature

and of the manifold complexities of life in an advanced industrial society such as ours.

For those students who wish to pass beyond a general appreciation of chemical science and to attain the training necessary for entering one or other of the numerous occupations for which more advanced work in chemistry is prerequisite, the following vocational possibilities are suggested as representative:

a. *Industry and Municipal Service.* Graduates in chemistry are often in demand for non-laboratory positions in industries manufacturing or employing chemicals: positions as research librarians, purchasing agents, secretaries, personnel workers, salesmen, advertisers. They are also employed in laboratory positions as analysts for police departments, water works, gas companies, ice plants, and producers of fertilizers, insecticides, drugs, flavors, and many other commodities.

b. *Government Bureaus.* Many arts college graduates trained in chemistry are now holding positions in various government agencies such as the Patent Office, the Bureau of Chemistry, and the Department of Agriculture.

c. *Medicine.* Training in chemistry is prerequisite for entrance to medical and dental schools, and for such positions as those of technicians in hospitals, as well as for most branches of medical research.

d. *Education.* Students interested in the teaching of chemistry in secondary schools can readily qualify for this profession by the satisfactory completion of a program arranged through the coöperation of this department with the School of Education.

Students taking chemistry as a major subject in the College of Arts and Sciences must complete satisfactorily Courses 1b; 2b, 31, 40, 51; 52, 21 and 22. Some biological science is required, also some mathematics and physics.

1a; 2a. General Chemistry.—This course deals with the general principles of the science and the elements of qualitative analysis. Classroom (lectures, discussion and demonstrations), *two hours a week;* laboratory (including recitations), *four hours a week.* One breakage card. *Four credit hours.*

Mr. Bradt and Members of the Departmental Staff

1b; 2b. General Chemistry.—A course similar to Course 1a; 2a, but for students who have indicated an intention to major in Chemistry or Chemical Engineering. Lecture, *two hours a week;* laboratory, *four hours a week.* One breakage card. *Four credit hours.* Equivalent to 1a; 2a. Mr. Osborn

21. 22. Introductory Theoretical Chemistry.—This is an introductory course in the fundamental principles of chemistry designed to prepare students for physical chemistry. It is recommended to majors in Chemistry and to premedical and predental students as well as other students desiring a

second-year elective in the Department of Chemistry. Prerequisite, Course 1a; 2a, or 1b; 2b. Classroom, *two hours a week. Two credit hours.*

Mr. Jenness

31. Micro-Qualitative Analysis.—Systematic theoretical and laboratory study of the fundamental principles of analysis as applied to the common cations and anions. Analysis of unknowns. Microtechnique without use of the microscope. Prerequisite, Course 1a; 2a, or 1b; 2b. Lectures and recitations, *three hours a week to mid-semester and one hour a week thereafter;* laboratory, *eight hours a week.* Two breakage cards. *Five credit hours.* Mr. Otto

40. Quantitative Analysis.—An introductory course illustrating the fundamental principles of gravimetric, volumetric, and electrolysis methods. Prerequisite, Course 31. Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* Mr. Otto

51; 52. Organic Chemistry.—An introductory course dealing with aliphatic and aromatic compounds. Prerequisite, Course 31 or at least C grades in Courses 1 and 2. Classroom, *three hours a week;* laboratory, *four hours a week.* Two breakage cards. *Five credit hours.*

Mr. Gilliland, Mr. Osborn

55. Contemporary Chemistry.—A study of contemporary chemists and chemical theory. Prerequisite, Course 52. Lecture, *one hour a week. One credit hour.* Mr. Gilliland

71; 72. Physical Chemistry.—The detailed study of fundamental principles of chemistry and their application to various fields. Lecture, recitations, and laboratory. Prerequisites, Course 40 and Physics 1; 2. Calculus is very desirable. Classroom, *three hours a week;* laboratory; *four hours a week.* One breakage card. *Five credit hours.* Mr. Brann, Mr. Tomlin

97. 98. Methods of Teaching Chemistry.—A course for prospective teachers of chemistry which includes administration, supervision, costs; laboratory arrangement, equipment, maintenance and supplies; preparation of solutions, demonstrations, lesson plans, testing programs; texts, laboratory manuals; grading and scoring; bibliography. Text, problems, and journal assignments. For juniors, seniors, and graduate students. Prerequisite, Course 1b; 2b, or equivalent. Classroom, *two hours a week. Two credit hours.* Mr. Brautlecht

Other courses in the Department of Chemistry not listed here are described under the College of Technology.

CLASSICS

PROFESSOR CHASE; PROFESSOR HUDDILSTON

Greek

MR. HUDDILSTON

The work in Greek is arranged with the idea of presenting several phases of ancient culture. Such courses are offered as will prove serviceable to the student of average interests, who, not having studied the ancient languages in the preparatory school, may desire to include in his college course some work bearing on the permanent contributions of early people to the civilization of ancient and modern times.

At present but one year of Greek language is offered; more will be given if there is sufficient demand.

1-2. BEGINNING GREEK.—Grammar and elementary work based on the Greek of the New Testament; reading of two of the Gospels. The second semester is devoted to Homer's *Iliad*. *Four hours a week.*

3. GREEK LIFE AND CULTURE.—A brief study of important features of the Greek legacy in art and literature. Assigned readings and lectures. *Two hours a week.*

4. GREEK IDEALS.—The development of Greek thought from Homer down to the period of the Hellenistic philosophies. The social and aesthetic significance of the Greek festivals and the Athenian ideas of education receive special attention. *Two hours a week.*

51. GREEK POETRY.—A general survey which does not presuppose any knowledge of the Greek language. The main attention is given to Homer and writers of the drama; considerable reading is done in English translation. Given in 1938-39 and alternate years. *Three hours a week.*

Latin

MR. CHASE

The courses in Latin are planned with a double purpose—to give some understanding of the best that Rome achieved and to train students for high-school positions as teachers of Latin.

The first purpose is cultural. It introduces students to the forms of classic literature as exemplified by Cicero, Livy, Tacitus, and Pliny in prose, by Terence and Plautus in dramatic art, and by a selection from the masters of lyric poetry. In addition, the courses are planned to give an introduction to the thought of the leading minds at Rome with some appreciation of its permanent value, and a comprehension of the Roman Empire as a milestone in the advance of European civilization.

The courses are also designed to give such knowledge of the Latin language and methods of teaching as would be required of a well-trained secondary-school teacher.

5. Livy.—Selections from the *History of Rome*. Reading, with discussion of language and Roman history. *Three hours a week.*

6. Cicero and Horace.—Reading of the *De Senectute* with some attention to Cicero's religious thought; study of the lyric poetry of Horace. *Three hours a week.*

7. 8. Latin Composition.—Development of more accurate understanding of Latin through practice in writing, with stress on grasp of forms and syntax. *One hour a week.*

9. Tacitus.—Reading and discussion of the *Agricola* and the *Germania*. This course involves an introduction to the history of the Roman Empire. *Three hours a week.*

10. Terence and Plautus.—A study of the development and characteristics of Roman comedy as seen in the *Phormio* of Terence and the *Captivi* and *Trinummus* of Plautus. *Three hours a week.*

21. 22. Latin Composition.—Accurate knowledge of syntax is stressed in the first semester and Latin rhetoric in the second. Either semester is open to students who have completed Latin 7. 8. Essential for prospective teachers. *One hour a week.*

23. The Younger Pliny.—Life and conditions in the Roman Empire as revealed by the letters of a Roman of the first century. Offered in alternate years. *Three hours a week.*

24. Horace and Juvenal.—Roman satire and social life as disclosed by the writings of the great satirists. Offered in alternate years. *Three hours a week.*

51. 52. Teachers' Course.—The objectives, content, and methods of the secondary-school Latin curriculum. Discussion of principles, solution of problems, outside reading, and investigation of special topics. Offered in alternate years. *Three hours a week.*

57. 58. Roman Philosophy.—Readings from the *De Rerum Natura* of Lucretius and the philosophical writings of Cicero and Seneca. Discussion of the leading schools of ancient philosophy. Offered in alternate years. *Three hours a week.*

ECONOMICS AND SOCIOLOGY

Associate Professor Kirshen (Acting Department Head); Professor Ashworth; Professor Allen; Associate Professor Chadbourne; Assistant Professor Lamson; Mr. Knowlton; Mr. Hobbah; Miss E. G. Wilson

It is the purpose of Economics and Business Administration to assist the student in understanding the way in which society produces and regulates its wealth. Economics is a Social Science and as such it deals with the broad problems of any social system. Not only does the department encourage the student to select an occupation or profession, but it also wishes the student to be a thinking citizen capable of analyzing and solving the social problems of his time. To these ends the work of the Department is directed.

Students may major in one or any combination of three fields: (1) Economics, (2) Business Administration, (3) Sociology. A minimum of eighteen hours is required, excluding elementary courses.

Students may combine a major in Economics with any other of the Social Sciences: Government, History, Philosophy, and Psychology.

Specific Requirements:

Economics: Es 1a; 2a, Principles of Economics, a prerequisite for all advanced courses unless waived by the head of the Department; Es 96, Seminar, for senior majors.

Business Administration: Es 1a; 2a, Principles of Economics, a prerequisite for all advanced courses unless waived by the head of the Department; Ba 9; 10, Accounting; Ba 96, Seminar, for senior majors.

Sociology: Sy 1; 2, Principles of Sociology, a prerequisite for all advanced courses unless waived by the head of the Department; Sy 95. 96, Seminar, for senior majors.

Senior majors in the department are required to take an oral comprehensive examination and present a satisfactory thesis in the spring semester.

Economics

1a; 2a. Principles of Economics.—A study and analysis of the fundamental characteristics and institutions of modern economic society. The principles underlying the production, distribution, and consumption of wealth are considered. *Three hours a week.*

Mr. Ashworth, Mr. Allen, Mr. Knowlton, Mr. Hobbah

1b; 2b. Principles of Economics.—A short course similar to Course 1a; 2a, for students in Technology and Agriculture. *Two hours a week.*

Mr. Ashworth, Mr. Knowlton, Mr. Hobbah

21. Labor Problems.—Similar to Course 72. For Technology students. *Three hours a week.* Mr. Knowlton

52. Social Control of Industry.—This course deals with the extension of government control over business activities for the purpose of social welfare, economic reform, and business recovery. *Three hours a week.*

Mr. Knowlton

61. The Business Cycle.—Theories of the nature, prediction, and control of the business cycle. Given in 1938-39 and alternate years. *Two hours a week.* Mr. Hobbah

64. International Trade and Finance.—Theory of international exchange; free trade versus protection. Barriers to foreign trade: tariffs, bounties, embargoes, quotas, and exchange restrictions. Recent trade policies of the United States will be considered. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Chadbourne

69. Modern Economic Systems.—A survey of socialism, communism, and fascism. The organization of agriculture, labor, capital, and trade is compared with those of the capitalist state. *Three hours a week.*

Mr. Knowlton

71. Public Finance.—The following topics will be considered; government activities and government expenditures, taxation and tax systems, budgets and other means of regulating and controlling government spending, and current problems of taxation. Juniors and seniors only. *Three hours a week.* Mr. Hobbah

72. Labor Problems.—A study of problems arising out of the relationships of employers and employees in modern industrial society. Special attention will be given to labor legislation and unionism. Juniors and seniors only. *Three hours a week.* Mr. Ashworth

76. Public Utilities.—A study of those industries "affected with a public interest." Problems considered include valuation of the plant, cost of

producing the service, pricing of the service, the development of regulation, duties toward the public, organization and management. Given in 1937-38 and alternate years. *Three hours a week.* MR. HOBBAH

91. DEVELOPMENT OF ECONOMIC THOUGHT.—A survey of the economic thinking of the Canonists, Mercantilists, and Physiocrats, and of a selected group of economists from the time of Adam Smith to the present day. The influence of the earlier ideas on contemporary economic thought, institutions, and problems is emphasized. Given in 1937-38 and alternate years. *Two hours a week.* MR. HOBBAH

92. ADVANCED THEORY.—A study of contemporary price and distribution theory as a tool in economic analysis. *Two hours a week.* MR. HOBBAH

95. 96. SEMINAR.—*Two or three hours.* THE DEPARTMENTAL STAFF

Business Administration

9; 10. ACCOUNTING.—The study and practice of the principles of accounting used in business. Since the course does not presume any knowledge of double-entry bookkeeping, a considerable part of the first semester's work is devoted to fundamental principles. Balance sheets and income statements, depreciation, reserves, sinking funds, partnership, and corporation problems are the principal topics of the second semester. *Three hours a week.* MR. CHADBOURNE

16. BUSINESS LAW.—A study of the basic legal principles guiding, expanding, and limiting business transactions. The nature of law, the enforcement of law, contracts, agency, and bailments are given special consideration. For juniors and seniors in Technology and Agriculture only. *Three hours a week.* MR. KIRSHEN

51. CORPORATION FINANCE.—The position of the modern business corporation is studied from the financial point of view. Corporate securities, intercorporate relations, underwriting, financial plans, management and control are a few of the basic problems considered. Given in 1938-39 and alternate years. *Three hours a week.* MR. KIRSHEN

53. MONEY AND BANKING.—The monetary and banking systems of the United States and other countries; special emphasis on the relation of banking to business. Juniors and seniors only. *Three hours a week.* MR. CHADBOURNE

54. INVESTMENTS.—The course deals with the selection of investments, with a study of the proper types of investments for dependents, the business and professional classes, and institutions. The different types of securities and

their relative merits are analyzed. An investigation is also made of the social and practical aspects of the investment banking business. Suggested preparation, Courses 1a; 2a; 51 and 53. Given in 1937-38 and alternate years. *Three hours a week.* MR. CHADBOURNE

55; 56. BUSINESS LAW.—This course is more advanced than Course 16 and includes, in addition, damages, negotiable instruments, guaranty and suretyship. Juniors and seniors only. *Three hours a week.* MR. KIRSHEN

57. TRUST AND CORPORATION POLICIES.—A study of the combination movement, the anti-trust laws, and the part played by the corporation. Present tendencies in American policies will be considered. Given in 1939-40 and alternate years. *Three hours a week.* MR. KIRSHEN

58. BUSINESS MANAGEMENT AND POLICY.—An analysis of the functions of management; the formulation and execution of business policy. Given in 1938-39 and alternate years. *Three hours a week.* MR. HOBBAH

95. 96. SEMINAR.—*Two or three hours a week.*

THE DEPARTMENTAL STAFF

Sociology

The sociology curriculum focuses the student's attention upon social relationships as phenomena capable of objective analysis. This is achieved through a study of (1) structure and function of society, as observed in social groups, institutions, codes, communities, and strata; (2) the dynamics of social change, as found in invention, cultural diffusion, and population trends; and (3) social disorganization, as reflected in dependency, crime, and community breakdown.

Sociology courses serve as useful background for students planning to enter (1) public social service work, as in state, county, or city welfare departments; (2) private social work, as in family welfare and child-care agencies; (3) probation and crime prevention; (4) public-health nursing; (5) youth-serving groups; (6) social research; and (7) social science teaching. A specimen curriculum in preprofessional preparation for social work appears on page 169 of this catalog.

Students majoring in sociology are required to take Sy 1; 2 and a minimum of eighteen hours including the Seminar, Sy 95. 96.

1; 2. PRINCIPLES OF SOCIOLOGY.—An introductory course furnishing basic data concerning the structure and functioning of human societies. Communities, groups, races, codes, institutions, stratification and social mobility are considered. Prerequisite for other courses unless otherwise specified. *Three hours a week.* MR. LAMSON, MISS WILSON

20. Introduction to the Field of Social Work.—An examination of the place of public and private social service work, historical backgrounds and present trends. Types of social work: medical, psychiatric, family case, and group work. Social work as a profession discussed in relation to courts, clinics, schools, hospitals, and social settlements. Visiting lecturers and field trips. Prerequisite, Sociology 1; 2 or permission of instructor. Offered in 1938-39 and alternate years. *Three hours a week.* Mr. Lamson

61. Social Pathology.—A survey of typical varieties of social maladjustment. Desertion, divorce, illegitimacy, prostitution, poverty, public and private methods of poor relief, unemployment, child labor, old age, mental disease, mental defect, suicide, and community disorganization are considered. Field trips. Prerequisite, Sociology 1; 2 or permission of instructor. *Three hours a week.* Mr. Lamson

62. Criminology.—A study of the characteristics, causes, and treatment of crime, including mental, physical, economic, and social factors; case studies of juvenile delinquents and criminals; the relation of race, nationality, age, and sex to crime; theories and forms of punishment and rehabilitation; methods of crime prevention. Field trips to jails and prisons. Prerequisite, Sociology 1; 2 or permission of instructor. *Three hours a week.* Mr. Lamson

81. Marriage and the Family.—A study of the sociological aspects of marriage and family relationships in primitive and modern life. This course is designed (1) to reveal to the student the basic nature of these institutions; (2) to show the specific stresses and strains to which they are today subjected; and (3) to prepare the student for intelligent participation in family life. Problems of the courtship and mating periods, preparation for marriage, relations between husband and wife and parents and children, family tensions, and family size are discussed. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Lamson

87. Social Evolution and Social Change.—Analysis of the evolutionary aspects of associations, institutions, and mores in human society. Social and cultural dynamics, invention, cultural diffusion, and theories of progress are studied in relation to the question of social causation. Given in 1937-38 and alternate years. Prerequisite, Sociology 1; 2 or permission of instructor. *Two hours a week.* Mr. Lamson

88. Population and Race.—A study of the factors involved in the composition, growth, and control of population. Birth and death rates, quality of peoples, eugenics, theories of population, migration, population and war, race relations and minority groups are considered. Prerequisite, Sociology 1; 2

or permission of instructor. Given in 1937-38 and alternate years. *Two hours a week.* Mr. Lamson

95. 96. Sociology Seminar.—*Two or three hours a week.* Mr. Lamson

ENGLISH LITERATURE AND COMPOSITION

Professors Ellis, Turner, and Small; Associate Professor Ashby; Assistant Professors Scamman, Crosby, Flewelling, and Coggeshall; Mr. Whitney; Dr. Leroy; Mr. Reynolds; Mrs. Crandon; Dr. Wence; Miss Baxter

Major subjects may be selected in English literature, American literature and history, journalism or creative writing, comparative literature, or dramatics (in conjunction with the Department of Public Speaking). A specimen curriculum in journalism may be found on page 165; others may be had upon request.

A major field may likewise be selected which will comprise courses in English and in some other subject, provided that unity exists between them. Obvious examples are English and history, or English and any foreign literature.

Students preparing for library work or employment with publishing houses should become acquainted with modern foreign languages and European and contemporary literature. English majors planning to enter the civil service, social service work, salesmanship, advertising, or professional schools in theology or law should build up a strong supporting minor in the social sciences: economics, government, history, and sociology; and in psychology. For all students majoring in English, an acquaintance with English and American history, philosophy, elementary German, and elementary psychology is recommended.

Students intending to pursue major programs in English should have completed the prerequisite courses Eh 3. 4 and Eh 7 or their equivalent, before the close of their sophomore year. A grade of C or better is expected in Eh 3. 4, and in eighteen hours of the major curriculum.

The departmental comprehensive examinations comprise a written examination in the mechanics of writing, late in the junior year, which serves also as a basis for the selection of senior tutors for freshmen deficient in composition; a critical report on the study of some selected author, early in the senior year; and an oral and written examination covering the field of English literature and the student's advanced literature courses, in his final semester.

Students pursuing major curricula in other departments who intend to offer English as a second teaching subject in secondary schools should prepare themselves by taking courses Eh 3. 4; 7 or 8; 57 or 58; 43 or 44; and 22 when offered. Eh 67 is also strongly recommended.

Courses in Composition and Rhetoric

1. Freshman Composition.—An intensive course in expository writing, for students in all colleges. Stress is placed upon correctness, clarity, and ease of expression and upon the organization of material. Frequent themes and conferences. Required of all freshmen not excused by the Department. *Three hours a week.*

Note: Freshmen who are particularly deficient in the fundamentals of grammar, sentence structure, and spelling are required to attend special tutoring groups in addition to the regular work of the course.

Mr. Turner (Chairman) and Members of the Department

2. Freshman Composition.—Description, narrative, letters, expositions based on library reading. The second semester of Freshman English for those students whose grade in English 1 is below C+; elective for others. *Three hours a week.*

Mr. Turner (Chairman) and Members of the Department

5 (6). Technical Composition.—A study of the forms of writing of greatest professional usefulness to engineers, agriculturists, and foresters. The forms of business correspondence, the construction of reports, and preparation of technical papers. *Not open to students in the College of Arts and Sciences. Two hours a week,* fall or spring semester.

Mr. Scamman (Chairman), Mr. Reynolds

7. 8a or 8b. Second-Year Composition.—In the fall semester the writing of weekly formal and informal essays, with a study of the informal essay in English literature; in the spring, either (8a) descriptive and narrative themes, with a study of the short story, or (8b) study and practice in specialized expository writing. Recommended for sophomores, especially for those who expect to select a major in the English field. *Three hours a week.*

Mr. Whitney (Chairman), Mr. Ashby, Mr. Flewelling

11. 12. Freshman Literature and Composition (Honors Group).—*See Courses in Literature.*

18. Literature for Freshmen.—This course includes practice in expository and critical writing. *See Courses in Literature.*

77. 78. Creative Writing.—An advanced course for students who have shown exceptional interest and ability in some field of writing. The types selected will vary in different years. Not accepted for graduate credit, unless by special permission from the Graduate Faculty. Prerequisite, completion of English 7 or 8 with honor grade. *Three hours a week.*

77a. The Short Story.—Fall semester. Mr. Whitney

78b. The Familiar Essay.—Spring semester. Mr. Whitney

77 (78)c. Verse Writing.—Not given in 1937-38. Mr. Ellis

77 (78)d. The One-Act Play. Mr. Whitney

Courses in Literature

3. 4. History of English Literature.—A study of English literature from the beginning to the present time, tracing its historical development and acquainting the student with the chief writers and their work. Readings, recitations, and lectures. English 3. 4 or 11. 12 is prerequisite for all advanced courses in English literature. *Three hours a week.*

Mr. Reynolds, Mrs. Crandon, Mr. Wence

9 (10). Modern Literature.—A study of specimens of literature of contemporary interest, with the design of cultivating the appreciation and enjoyment of good reading. *Not open to students in Arts and Sciences. Two hours a week,* fall or spring semester.

Mr. Scamman (Chairman), Mr. Small, Mr. Reynolds

11. 12. Freshman Literature and Composition (Honors Course).—A survey of English literature from the beginning to the present time. Practice in theme writing of expository, descriptive, and narrative types. Open only to freshmen excused from English 1. *Three hours a week.*

Miss Crosby, Mr. Whitney

18. Literature for Freshmen.—The reading and study of works of literature representing the chief literary types: fiction, essays, poetry, and drama, with several exercises in composition. This course may be elected instead of or in addition to English 2 by freshmen who have completed English 1 with a grade of C+ or better. *Three hours a week.*

Miss Crosby (Chairman), Mr. Ashby, Mr. LeRoy

37 (38). Tennyson and Browning.—Primarily a reading course, with much class discussion. An important aim is the cultivation of a fondness for poetry in the student. *Two hours a week.* Mr. Turner

43 (44). Chief Writers of America.—A study of the principal writers of the United States in the nineteenth century, with some attention to

Edwards and Franklin in the eighteenth. *Three hours a week*, fall or spring semester. MR. FLEWELLING

45. 46. CONTEMPORARY LITERATURE.—A study of present-day tendencies and production in poetry, drama, and the novel. The fall semester is devoted to contemporary British literature, the spring to American. *Three hours a week.* MR. FLEWELLING

For Courses 51-100 inclusive, Eh 3. 4 (or 11. 12) is prerequisite, except for Dean's List students whose grades in English have been satisfactory and who have the instructors' permission to enroll. These courses may, with the approval of the Graduate Faculty, be taken for graduate credit by any qualified student who has already completed satisfactorily a full advanced course in the Department.

53. CHAUCER.—A study of selections from the *Canterbury Tales* and the chief minor poems, stressing the reading of Chaucer as poetry, his literary range and qualities, and the picture of his time given in his works. *Three hours a week.* MISS CROSBY

55. 56. NINETEENTH CENTURY POETRY.—In the first half, the poets of the English Romantic Movement—Wordsworth, Coleridge, Byron, Shelley, and Keats—are considered; in the second, those of the Victorian Age, especially Tennyson, Browning, Arnold, and the Pre-Raphaelites. Given in 1937-38 and alternate years. *Three hours a week.* MR. TURNER

57. 58. SHAKESPEARE.—A brief consideration of the English drama prior to Shakespeare, followed by a careful study of several of his most important plays and the reading of others. Attention is given to Elizabethan stage conditions and the dramatic work of Shakespeare's contemporaries. *Three hours a week.* MR. ELLIS, MR. SMALL, MISS CROSBY

59. 60. NINETEENTH CENTURY BRITISH PROSE.—A study of the chief non-fiction prose writers of the nineteenth century, with attention to form and to the ideas conveyed. The authors principally treated are Coleridge, Lamb, Hazlitt, De Quincey, Carlyle, Macaulay, Arnold, Ruskin, Newman, Huxley, Pater, Stevenson, and Butler. *Three hours a week.* MR. LEROY

61. 62. HISTORY OF THE ENGLISH DRAMA.—In the first half, the development of the drama in England from the miracle plays through the Elizabethan period. In the second half, subsequent tendencies from the Restoration period to the present day, with special emphasis upon contemporary drama. Given in 1938-39. *Three hours a week.* MR. ASHBY

63. ELIZABETHAN LITERATURE.—A pro-seminar course, treating the non-dramatic poetry and prose of the sixteenth century, with particular attention to the poetry of Spenser. *Three hours a week.* MR. ASHBY

64. Milton and His Time.—A pro-seminar course. Chief emphasis is laid upon the life and work of John Milton, studied against the background of the literature of the seventeenth century to the Restoration of the Stuarts. *Three hours a week.* Mr. Ashby

65. 66. Restoration and Eighteenth Century Literature.—A study of the evolution of neo-classicism and its transition into the early Romantic Movement, as shown in the various types of literature that flourished in this period. Given in 1937-38 and alternate years. *Three hours a week.* Mr. Ashby

71. 72. American Literature.—A study of the development and history of American literature, including the political, social, and religious ideas which it reflects. *Three hours a week.* Mr. Ellis

81. 82. The English Novel.—This course traces, in the first semester, the history of the English novel from the medieval prose romances to the death of Scott. Beginning with Dickens and Thackeray, the second semester treats the Victorian novel in considerable detail and makes some study of recent British novelists. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Turner

101. 102. Graduate Seminar.—Given when there is sufficient demand. Subject and credit vary.

Courses in Journalism

23-24. News Writing and Editing.—A study of news as defined by the practice of the metropolitan daily. Class discussions and exercises. The mechanics and theory of copy-desk editing. Laws affecting the press: libel and contempt of court. Standards and ethics. Open to sophomores and upperclassmen. Prerequisites: English 1. 2; History 3. 4 or 5; 6. *Three hours a week.* Mr. Coggeshall

25. The Newspaper in the Twentieth Century.—The history of the American press. The newspaper as a social institution. The newspaper as an organ of political opinion. Prerequisites: A minimum grade of C in English 23-24; History 5; 6; Government 31. 32, or consent of the instructor. *Three hours a week.* Mr. Coggeshall

28. Departmental or Feature Writing.—Practice in various forms of specialized writing for daily and weekly newspapers, feature sections, etc. Assignments will vary according to the objectives of individual students. Prerequisites: a minimum grade of C in English 23-24; 25, or consent of the instructor. Given in 1937-38 and alternate years. *Two hours a week.* Mr. Coggeshall

30. The Country Newspaper.—A study of the administrative, mechanical, and editorial problems of the weekly journal. The course will be associated as far as possible with the weekly newspapers of the State. Prerequisite: a minimum grade of C in English 23-24, or consent of the instructor. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Coggeshall

31. The Newspaper as a Factor in International Relations.—News as a world commodity, censorship and propaganda, the work of the foreign correspondent; the press and public opinion as a factor in precipitating war; the problem of international negotiation and the demand for publicity. Prerequisites: a minimum grade of C in English 23-24; History 5; 6; 54; 67. 68, or consent of the instructor. *Three hours a week.* Mr. Coggeshall

Courses in Linguistics

51; 52. Anglo-Saxon.—A study of Anglo-Saxon grammar and reading of easy prose and poetry. Reading of the Anglo-Saxon epic *Beowulf* in the second semester. Lectures on the literature of the Anglo-Saxon period. *Three hours a week.* Mr. Small

67. History of the English Language.—English words and their background; a study of the changes in sounds, forms, and meanings that have produced our contemporary English. *Two hours a week.* Mr. Small

Courses in Comparative Literature

Cl 73; 74. Literary Criticism.—A study of literary practices and standards from Aristotle to the present, including American criticism. The reading not only of works of criticism, but also of some of the recognized masterpieces of Continental literature to which critical principles have been most frequently applied. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Ashby

Cl 75. 76. European Literature.—A survey of European literature from Homer to the present, showing the relationship among the literatures of different epochs and countries. The first semester comes down to the Renaissance; the second, to the present. Course 76 may not be taken separately except by permission. Foreign language majors may substitute other readings for works treated in their major courses. No knowledge of foreign languages is required. *Three hours a week.* Mr. Turner

(See also Fr 51. 52; Gk 51; Gm 59 (60); Sp 57. 58.)

Courses in the Teaching of English

22. Teaching of English in the High School.—A consideration of the chief problems confronting the teacher of high-school English composition and literature. The presentation of the different literary types; essentials and methods in composition; choice of texts, sequence of literary readings, and other topics. *Two hours a week.* Miss Crosby

29a. Supervised Student Teaching of English.—(See School of Education). For approved senior tutors. *Two hours a week,* first or second half of fall semester. *One credit hour.*

GEOLOGY

These and other courses in Geology are described under the Department of Civil Engineering in the College of Technology.

Ce 12. Economic Geography.—Deals with the principles of geography, especially applied to the common economic products, treating their distribution, characteristics, and uses. *Three hours a week.* Mr. Chase

Ce 13. Physical Geology.—Introduction to general dynamical geology, covering the materials, agents, and processes of geology. *Three hours a week.* Mr. Chase

Ce 14. Historical Geology.—A review of the earth's history, its past land distribution, mountain revolutions, rock formations, climates, and living forms. *Three hours a week.* Mr. Chase

GERMAN

Professor Drummond; Associate Professor Klein;
Assistant Professor Miles

The Department of German offers the student an opportunity to become acquainted with the great literature of a foreign nation.

In addition to its cultural worth, German has a great practical value for students who intend to do research work in literature, history, economics, philosophy, and especially in the natural sciences, since a great deal of scientific literature is written in German.

Special courses, too, are offered for those students who desire to obtain a good writing and speaking knowledge of German.

1-2. First-Year German.—A course for beginners. Grammar, composition, translation, conversation. Credit is not given for less than a year's work to students in the College of Arts and Sciences. *Four hours a week.*
Mr. Drummond, Mr. Klein, Mr. Miles

3. 4. Short Story.—For students who have had Course 1-2 or the equivalent. Translation, composition, grammar review. *Three hours a week.*
Mr. Drummond, Mr. Miles

5. 6. The Drama.—For students who have had Course 3. 4 or the equivalent. A study of the German drama including selections from such eighteenth and nineteenth century writers as Lessing, Schiller, Hebbel, Kleist, Hauptmann. Lectures and discussion. *Three hours a week.* Mr. Drummond

7. 8. The Novel.—For students who have had Course 5. 6 or the equivalent. Critical reading of novels by such authors as Goethe, Meyer, Ludwig, and Sudermann. Lectures and essays. *Three hours a week.*
Mr. Klein

13. 14. Elementary German Composition and Conversation.—For students who have had Course 1-2 or the equivalent. *Two hours a week.*
Mr. Miles

15. 16. Scientific German.—Open only to students whose previous study of German will enable them to read scientific German with profit. *Two hours a week.* Mr. Klein

17. 18. Advanced German Conversation and Composition.—For students who have had Course 13. 14. *Two hours a week.* Mr. Klein

19-20. German for Chemists.—A beginning course in German for students in the Colleges of Agriculture and Technology, and for students in the College of Arts and Sciences who intend to major in Chemistry. The reading matter is chiefly in chemical German with incidental stress upon grammar. *Three hours a week.* Mr. Klein, Mr. Miles

21; 22. German for Chemists.—Continuation of Course 19-20, which is prerequisite. Should be taken by students who take Course 19-20. *Three hours a week.* Mr. Klein, Mr. Miles

The following courses are given when there is sufficient demand.

51. 52. Studies in Eighteenth Century Literature.—Special attention is given to the life and works of Klopstock, Lessing, Wieland, Goethe, and Schiller. Critical study of assigned works, lectures, and discussions. *Two hours a week.* Mr. Drummond

53. 54. Goethe.—Lectures on the life and work of Goethe, with a critical study of Faust. *Two hours a week.* Mr. Drummond

55. 56. Studies in Nineteenth Century Literature.—The various literary movements of the nineteenth century; lectures, discussions, outside reading. *Two hours a week.* Mr. Klein

57. 58. Seminar.—A study of some special topic in German literature. *Two hours a week.* Mr. Drummond, Mr. Klein

59 (60). History of German Literature.—Lectures in German, outlining the history of German literature. Recitations, outside reading. *Two hours a week,* fall or spring semester. Mr. Drummond

The department is also prepared to give, when there is sufficient demand, the following courses: 61. 62. Early New High German; 101. 102. Gothic: Introduction to the Study of Germanic Philology; 103. 104. Old High German; 105. 106. Middle High German.

HISTORY AND GOVERNMENT

Associate Professors Dow, Whitmore, and Wilson;
Assistant Professor Morrow; Dr. McReynolds

Coöperating member of the Department:
Dr. Huddilston, Professor of Ancient Civilization

Major Students. Since students concentrate in History and Government in preparation for widely divergent occupations, the major requirements of the Department have been given considerable flexibility. Pre-law students, those planning to enter the civil or diplomatic service, and those interested in state or city administrative positions are advised to take advanced courses in government, modern history, and economics. For theology, emphasis should be placed on ancient and medieval history with supporting courses in philosophy and English. Students looking forward to library work or to connections with publishing companies will find that, in addition to medieval and modern history, courses in foreign languages and literature are valuable. Majors in History or Government who plan to go on with the subject in graduate school should have a knowledge of French and German.

Students majoring in History or Government are expected to complete at least eighteen hours of work in approved courses. Courses Hy 1-6; 21, 22, Gt 31, 32 do not count as major courses under ordinary circumstances. For the purposes of the major, the courses of the Department will be considered in three divisions or fields of specialization: (1) European History, (2) American History, (3) Government. Having chosen his field of specializa-

tion, the student takes at least two approved courses (four semesters) in that division. Students who expect to specialize in European or American History should complete Hy 3. 4 and Hy 5. 6 by the close of their sophomore year. Those who expect to specialize in Government, or History and Government, should complete Gt 31. 32 and Hy 3. 4 or Hy 5. 6 by the close of their second year. Principles of Economics and Sociology are strongly recommended for prospective majors in History and Government. Students may combine a major in History or Government with any other of the Social Sciences: Economics, Philosophy, Psychology, and Sociology.

Courses numbered under eleven are open to freshmen; those numbered above fifty are not open to freshmen or sophomores except by special permission from the head of the Department.

Teacher Training. Students in the School of Education or College of Arts and Sciences who expect to offer History as a teaching subject should take Courses 3, 4, 5, 6, and six hours of advanced work previously approved by the head of the Department. Grades should be C or better in all courses. Many teachers are called upon to teach Civics, Citizenship, or Current Events courses, and consequently, Gt 31. 32 (or 36) is advised for this purpose. Subjects commonly combined with History for teaching purposes are English, French, Latin, science, or mathematics.

History

History includes in one continuous narrative the story of mankind so far as it is known. Courses offered by the Department of History and Government are limited to selected periods which seem significant for the present generation. History is more than "past politics"—it includes economic, social, intellectual, artistic, and scientific events. It deals with ages, races, and social movements, attempting to interpret its materials in such a way as to throw light on our present complex civilization and the future course of events.

1. 2. Ancient Civilization.—A study of the achievements of the Greeks and Romans in laying the foundations of Western life and thought with some attention to Egyptian and Eastern civilization as the background of classical culture. An important part of the course lies in the emphasis that is given to the Greek thought and Roman rule in the midst of which Christianity sprang up. Readings, lectures, and notebook. *Three hours a week.* Mr. Huddilston

3. 4. United States History.—From the organization of the new government in 1789 to recent years. The work will cover such topics as the development of democracy, growth of the West, slavery and sectionalism,

the Civil War, reconstruction, the making of modern America, industrialization, and imperialism. *Three hours a week.* MR. WHITMORE

5; 6. SURVEY OF WESTERN EUROPE.—This course is designed to show how modern Europe and its civilization came into existence. The work will include such subjects as the history of the Church, the medieval empire, the growth of towns, evolution of the Western State System, the expansion of Europe, cultural and economic changes, and the World War. *Three hours a week.* MISS WILSON, MR. MORROW

17. 18. HISTORY OF ENGLAND.—From earliest times to the present. The political aspects are emphasized, with some attention to social and economic factors. Stress is placed upon the development of parliamentary government and the evolution of modern England and the British Commonwealth of Nations. *Three hours a week.* MR. MCREYNOLDS

21 (22). CURRENT WORLD PROBLEMS.—A course designed for those who wish to be intelligently informed on world affairs, but do not make history their major subject. Lectures and discussions on outstanding problems of history, government, and politics. Open to all students in the University except freshmen. *Two hours a week.* MR. MCREYNOLDS

53. EUROPE FROM 1815 TO 1870.—This course will be concerned chiefly with the origins and the development of economic and political liberalism, the growth of modern nationalism, and the achievement of political democracy in Europe. The effect of these developments upon the literature and thought of the nineteenth century will be studied briefly. Prerequisite, Course 6. *Three hours a week.* MISS WILSON

54. EUROPE SINCE 1870.—The causes of the World War are sought in a study of nationalism, imperialism, and the international anarchy which these engendered. A study of the treaties of 1919 and their effects is a part of a brief survey of current European problems. Prerequisite, Course 6. *Three hours a week.* MISS WILSON

55. 56. ANCIENT HISTORY.—The work of the first semester centers on those nations of the Near East whose civilization culminated before 500 B.C., such as Assyria and Babylonia. Special attention is given to the contributions of Egyptian, Babylonian, Hittite, and Cretan cultures. The second semester follows the Mediterranean passing in review important factors in Phoenician, Greek, and Roman history. Investigation of assigned topics, special reports, and discussions. Open only to history majors except on arrangement with the instructor. *Three hours a week.* MR. HUDDILSTON

57. AMERICAN COLONIAL HISTORY, 1607-1688.—The founding and the political, social, and economic development of the colonies in the seventeenth

century. English colonial policy of the Commonwealth and the Restoration periods. Permission of the instructor required. *Two hours a week.*

MR. WHITMORE

58. AMERICAN COLONIAL HISTORY, 1689-1789.—A study of the development of the colonies in the eighteenth century, including their western expansion, imperial relations, intercolonial relations, development of self-government. Emphasis is placed on the remote and immediate causes and the results of the American Revolution. Permission of the instructor required. *Two hours a week.* MR. WHITMORE

59. 60. ECONOMIC AND SOCIAL HISTORY OF THE UNITED STATES.—A study of economic and social movements in the United States from the colonial period to the present. Included are such topics as colonial production and commerce; agricultural development in the South and West; commerce, labor, and the farmer in the machine age. Prerequisite, six hours of history or economics. *Three hours a week.* MR. MCREYNOLDS

62. MARITIME HISTORY OF THE UNITED STATES.—Ships and trade from Colonial days to the present, with emphasis on shipbuilding and shipping in New England, New York, and Maryland. The following topics are illustrative: famous ships and ship builders; evolution from wood to iron and steel ships; California and the clippers; the effect of the Civil War and the World War on our merchant marine. Permission of the instructor required. *Two hours a week.* MR. WHITMORE

67. 68. AMERICAN DIPLOMACY.—The relations of the United States to the outside world. Such policies will be examined as the Monroe Doctrine, Pan-Americanism, and the "Open Door." Attention will be paid to our attitude toward the acquisition of territory, arbitration, limitation of armaments, and the League of Natoins. Prerequisite, Course 3. 4, or 31. *Three hours a week.* MR. MORROW

77. 78. THE MIDDLE AGES.—A more advanced study of the period from 500 to 1500 than is undertaken in Course 5, 6. Special emphasis will be given to a study of medieval institutions and to social and economic matters. The Byzantine empire, Slavic Europe, and the westward advance of the Asiatic peoples will be studied as an introduction to modern problems in the Near East. Prerequisite, Course 5. *Three hours a week.* MISS WILSON

79. 80. CULTURAL AND INTELLECTUAL HISTORY OF EUROPE, 400-1500.—This course follows the declines and advances of civilization from the end of the Roman period to the beginning of modern times. Such subjects will be considered as the science, religion, and philosophy of the transition period; contacts with Mohammendan civilization; the scientific renaissance; the rise

of universities; art and architecture; and humanism and the Italian renaissance. Prerequisite, Course 5. *Three hours a week.* MISS WILSON

81. 82. THE FAR EAST.—An account of the culture, history, politics, and international relations of China and Japan, leading to an appraisal of the present situation in the Far East. Special attention is given to Russian and American policy in Asia and the problems created by Japan's promotion of a "Monroe Doctrine" for Asia. Prerequisite, six hours of history. *Two hours a week.* MR. MCREYNOLDS

101. 102. SEMINAR.

64. CANADIAN HISTORY will be given in case of sufficient demand.

Government

The study of government, or political science, covers the activities of governing agencies from towns and cities to international bodies. It is concerned with the origin and development of political institutions and their social effects, and with the possibilities for improvement. As the activities of present-day governments are almost countless and affect the citizen at every moment, political science is closely related to all the social sciences, especially to economics, sociology, and psychology. Like other social studies, it is deeply rooted in history.

The primary purpose of instruction in government is to train college students for active and intelligent citizenship. Those who do not enter public life themselves will be able as citizens to help raise the level of governmental efficiency.

Public Service Training. With the rapid expansion of government agencies and services there has come an added need for public servants with basic training in government and administration. A large proportion of the public hold elective or administrative offices at some time during their careers. Opportunities for trained men and women in public service are increasing. This is especially true of such fields as city management, health administration, public welfare, and financial administration. Advanced technical or professionl training is required for many positions, but basic undergraduate training in government is valuable in all instances. A broad viewpoint and cultural background can be attained at the same time, which will be useful in any occupation entered.

Specimen Curricula have been prepared in the following subjects and are obtainable from the Dean of the College of Arts and Sciences:

Pre-legal Training
Foreign Service
Public Administration

31. 32. American Government.—A course dealing with the national, state, and local governments and the functioning of the American party system. The historical development and practical operation of political institutions will be viewed in their relation to present problems of a legislative, judicial, or executive nature. *Three hours a week.* Mr. Dow

33 (34). Municipal Government and Administration.—A survey of the governmental structure and functions of American municipalities, and a careful analysis of existing conditions. Special study is given to administrative problems arising from such functions as police, education, charities and correction, finance, public works, and city planning and zoning. Prerequisite, Course 31. *Three hours a week.* Mr. Dow

36. European Government.—A study of governments, political parties, and current problems in the leading nations of Europe, such as Great Britain, France, Germany, Italy, and Russia. Prerequisite, Course 31. *Three hours a week.* Mr. Dow

51; 52. Public Administration.—The practical problems of administration in the modern state. The development of administration; principles of departmental organization and control; administrative law; public relations; personnel; financial administration. Lectures, laboratory, and field trips to governmental agencies. Prerequisite, Course 31. 32. *Three hours a week.* Mr. Dow

73. 74. International Relations.—A study of the fundamental realities which underlie international relations, and of the rules which govern them, with illustrative material taken from recent and current events and policies. Prerequisite, six hours of history or government. *Three hours a week.* Mr. Morrow

83; 84. The American Constitution.—The origin and development of our constitution, from 1787 to the present. Lives of famous judges; court organization and procedure; regulation of commerce; protection of life, liberty, and property—these are typical of the subjects studied. Prerequisite, Course 3. 4, or 31. 32. *Three hours a week.* Mr. Dow

101. 102. Seminar.

The following courses will be given in case of sufficient demand:—35. Principles and Problems of Government; 87; 88. International Law; 99; 100. Political Theory.

HONORS COURSES

Freshman Year

Gh 46. Freshman Tutorial Readings.—The purpose of this course is to assist the freshman in discovering his special interests and aptitudes. The tutor will seek to further this purpose by informal questioning and discussion and by the assignment of appropriate reading. Given only in the spring semester. *Two credit hours.*

Sophomore Year

Gh 47. 48. General Reading.—This course is designed to make the student acquainted with some of the great books of the world—that is to say, *readable* books of established reputation, particularly those which have figured prominently in the history of occidental culture. These may be of all types, and be concerned with a great variety of subjects, scientific as well as literary. The reading will be confined in the main to a prescribed list, but this list will be extensive enough to allow the student abundant freedom of choice and sufficient opportunity to indulge his special interests. *Three credit hours.*

Junior Year

Gc 49. 50. Tutorial Honors.—This general course when elected by students in the College of Arts and Sciences may be used in one of three ways: (1) for the pursuit of some subject outside of the student's major field, (2) for a continuation of the Honors reading program of the freshman and sophomore years, or (3) for the pursuit of some subject in the student's major field in anticipation of the Major Honors course of the senior year. Application for admission to this course should be made to the Dean of the College. See also Tutorial Honors under the heading General Courses. *Two credit hours.*

Senior Year

Gh 53; 54. Major Honors.—This course is the culmination of the Honors program. Coming at the close of this program, it is expected to afford evidence of the extent to which the student has profited by Honors work, and to offer him an opportunity to manifest the qualities that this work is intended to develop. It requires him to make an intensive study of some special subject within his major field and to embody the results of this study in a substantial thesis. Both semesters are needed for this undertaking. *Three credit hours.*

MATHEMATICS

Professor Willard; Associate Professors Bryan and Jordan; Assistant Professor Lucas; Mr. Stewart; Mr. Lamoreau; Mr. Kimball; Mr. Bowie; Mr. Perkins

The function of the Department of Mathematics is two-fold. On the one hand the Department offers courses to students who are interested in mathematics as a preparation for research and the profession of teaching. It prepares such students to undertake graduate study in mathematics or to teach the subject in the secondary school. The Department also supplies adequate mathematical foundation for students in the College of Arts and Sciences who are interested in the application of mathematics to the study of the physical, biological, and social sciences.

On the other hand it acts as a service department for the Colleges of Technology and Agriculture. In this capacity it furnishes the students of those colleges with sufficient training in mathematics to enable them to carry forward successfully their technical studies.

Beginning with 1938-39, those engineering students who are well qualified as to both ability and training will be placed in advanced sections. For the freshman year these students will take Courses 11 and 12. It is also expected that all students will start Differential Calculus during the spring semester of the freshman year.

Students whose major subject is mathematics are required to take Courses 1, 2 (unless offered for admission), 3, 5, 6, 7, 8, and to elect other courses to a total of not more than forty hours. At least twelve hours must be chosen from courses in mathematics numbered 50 or above, and Astronomy 15, 16, 59, and 60. Mechanics 51 and 52 may be substituted for ten hours of the above group. Astronomy 11 may be taken as a mathematics elective. Students majoring in mathematics who intend to teach are advised to elect Courses 19, 20, 26, 63, and 64 as well as several courses in physics.

1. Trigonometry.—The trigonometric functions, radian measure, functions of two or more angles, logarithms, trigonometric equations, inverse functions, solution of right and oblique triangles. *Two hours a week.*

Mr. Willard, Mr. Bryan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Bowie, Mr. Perkins

2. Solid Geometry.—Solid and spherical geometry, including original demonstrations and the solution of numerical problems. Open to all freshmen who have not offered solid geometry for admission. *Three hours a week.*

Mr. Bowie

3. College Algebra.—A brief review of radicals, the theory of exponents, logarithms, quadratic equations, the binomial theorem, determinants, theory of equations. *Two hours a week.*

Mr. Willard, Mr. Bryan, Mr. Jordan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Bowie, Mr. Perkins

5. Advanced Algebra.—Topics in college algebra not covered in Course 3. Open to students who have taken Courses 1 and 3, and to freshmen with especially good high-school preparation. *Three hours a week.*

Mr. Kimball

6. Analytic Geometry.—The point, line, circle, and conic sections; higher plane curves; elements of solid analytic geometry. Open to students who have had Courses 1 and 3; the equivalent of Course 2 is desirable. *Four hours a week.*

Mr. Willard, Mr. Bryan, Mr. Jordan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Bowie, Mr. Perkins

7. Differential Calculus.—Differentiation of algebraic functions and of the elementary forms of transcendental functions, successive differentiation, differentials, rates, maxima and minima, expansion of functions, series. Open to students who have taken Courses 1, 3, and 6. *Five hours a week.*

Mr. Willard, Mr. Bryan, Mr. Jordan, Mr. Lucas, Mr. Stewart, Mr. Kimball

8. Integral Calculus.—A continuation of Course 7. Integration of the elementary forms; integration as a summation; various methods of integration. Applications of differential and integral calculus. *Five hours a week.*

Mr. Willard, Mr. Bryan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Bowie

9; 10. Trigonometry and Its Applications.—A course in trigonometry given to freshmen in Forestry. This course is similar to Course 1 but is more extensive and contains more applications. *Two hours a week.*

Mr. Jordan, Mr. Lucas, Mr. Stewart, Mr. Perkins

11. Freshman Mathematics.—The first part of the course consists of algebra and trigonometry. The latter part of the course is devoted to analytic geometry. Open to students selected by the Department. *Four hours a week.*

Mr. Kimball, Mr. Lucas

12. Calculus.—Differentiation of algebraic functions and the elementary forms of transcendental functions, successive differentiation, differentials, and applications. Prerequisite, Course 11. *Four hours a week.*

Mr. Kimball, Mr. Lucas

13. Spherical Trigonometry.—An elementary course with problems and applications to spherical astronomy. Not given in 1937-38. *Two hours a week.* Mr. Kimball

17; 18. Mathematical Theory of Investment.—A study of interest, discount, annuities, amortization, the valuation of bonds, sinking funds and depreciation, building and loan associations; also the theory of probability and its application to life annuities and life insurance. Throughout the course numerous problems are solved to illustrate the theory and to fix the principles involved. *Two hours a week.* Mr. Stewart

19; 20. Statistics.—The various topics in statistics will be introduced by illustrative material from the fields of economics, business and public administration, and applied science. The course is designed to enable the general student critically to evaluate and understand the preparation, presentation, and interpretation of statistical material. *Two hours a week.* Mr. Bryan

23; 24. Introduction to Mathematical Analysis.—A general introductory course in mathematics for freshmen in the College of Arts and Sciences especially for those who are interested in the physical, biological, and social sciences. It consists of a coördinated development of topics in algebra, trigonometry, analytic geometry, and introductory calculus. *Four hours a week.* Mr. Bryan

26. College Geometry.—An elementary course in modern synthetic geometry. The nine-point circle, harmonic section, poles and polars, Ceva's theorem, Menelaus's theorem are among the topics considered. Emphasis is placed on the solution of original exercises. *Three hours a week.* Mr. Lucas

51. Advanced Analytic Geometry.—Review of the fundamentals of Course 6; advanced theory of the conic sections; the general equation of the second degree in two variables; transformation of coördinates; polar coördinates; higher plane curves. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Lucas

52. Solid Analytic Geometry.—An introductory course. Among the topics considered are coördinates in three-dimensional space; lines and planes; types, classification, and properties of quadric surfaces; transformation of coördinates. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Lucas

53; 54. Advanced Calculus.—Continuation of Course 7; 8. Partial differentiation and its applications; application of calculus to solid geometry; series, including power series and Fourier series; double and triple integration, line integrals; complex numbers, hyperbolic functions. *Three hours a week.* Mr. Lucas

55. Differential Equations.—A course in the solution of ordinary differential equations and their applications. Emphasis is laid on the methods used in solving equations of the common types. Open to students who have taken Course 7; 8. *Three hours a week.* Mr. Lucas

61. History of Mathematics.—A chronological survey of the important developments in mathematics from the beginnings of the subject to the present time. Lectures, reference studies, and recitation. Prerequisites, Courses 1, 3, 6, 7. Courses 2, 8, 26 and a reading knowledge of French and German are desirable. In the case of experienced teachers, certain of the above prerequisites may be waived. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Bryan

63; 64. Teachers' Course in Mathematics.—A study of the kind of mathematics suitable for the secondary school from the point of view of modern mathematics. Through conference, students who so desire may make a study of the teaching of college mathematics. Prerequisites, Courses 1, 3, 6, 7. In the case of experienced teachers, certain of the above prerequisites may be waived. Given in 1937-38 and alternate years. *Three hours a week.* Mr. Bryan

68. Theory of Numbers.—A study of the elements of the theory of algebraic numbers. The discussions will consider the divisibility of integers, congruences, and quadratic residues. Admission by consent of the instructor. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Bryan

The department is also prepared to give the following courses, which may be offered when there is sufficient demand: 65. Theory of Equations; 66. Modern Projective Geometry; 71; 72. Modern Higher Algebra; 73; 74. Advanced Statistics; 101. Theory of Functions of a Complex Variable; 102. Elliptic Functions; 105. Vector Analysis; 109. Celestial Mechanics; 110. Hydrodynamics; 115. Theory of Functions of Real Variables; 116. Fourier's Series; 117. Theory of Substitution Groups and of Algebraic Fields; 118. Theory of Transformation Groups (Lie Theory); 119; 120. Differential Geometry.

MUSIC

Professor Sprague

The music curriculum is formulated with the general objective of contributing toward a well-rounded college education. The primary aim of all the offerings of the Department of Music—aesthetic, theoretical, and applied—

is to promote a constantly widening acquaintance with the literature of music. The courses all move toward this end: the aesthetic provide a listening survey of comparative epochs and "schools"; the theoretical lead to a more exhaustive and detailed working knowledge, through analysis and composition; the applied, both in individual and ensemble performance, give the creative product its living realization.

Although the purpose of instrumental and vocal instruction is not to make professional musicians but rather to open to the student a broader grasp of the significance of great music, the University recognizes its obligation to offer those who enter college with some mastery of technique an opportunity to maintain and further advance this acquirement.

3. 4. Music Appreciation.—The masterpieces of music analyzed and interpreted, with a consideration of period tendencies and historical positions of composers. The evolution of form from the folk-song through the symphony. Lectures, illustrations, prescribed readings, reports. No prerequisites. *Two hours a week.*

5; 6. Introductory Harmony.—A study of the fundamental structure of music composition, specifically of the conditions under which tones sound together and move in combination. Prerequisite, a knowledge of notation. *Two hours a week.*

7; 8. Advanced Harmony.—Supplementary to Course 5; 6 and a continuation of the more advanced problems of tone combination. Harmonic analysis, including a brief survey of modernistic tendencies. Given in 1937-38 and alternate years. *Two hours a week.*

9; 10. Counterpoint.—The art of combining melodies, a correlative with Harmony as the material of composition. Analysis of masterworks. Composition projects. Prerequisite, Course 5, 6. Given in 1938-39 and alternate years. *Two hours a week.*

11. 12 Music in the Nineteenth Century.—Romanticism in musical art, particularly as reflected in the symphonic poem and Wagnerian music drama. Analysis of masterworks. Prescribed readings and reports. No prerequisite. Given in 1937-38 and alternate years. *Two hours a week.*

13. 14. Orchestration.—A study of the modern symphony orchestra. Analysis of representative works through score-reading, phonographic records, and attendance at concerts. Assigned readings in history and theory. Practical scoring. An assurance of essential preparation is required. Given in 1938-39 and alternate years. *Two hours a week.*

25. 26. Chorus.—The study and performance of representative choral repertoire, with a consideration of the composers' historical positions and

creative aims. An assurance of vocal aptitude is required. *Two hours a week. One hour credit.*

27. 28. ORCHESTRA.—A program in orchestral ensemble, generally of symphonic order, similar to that of Course 25. 26. An assurance of instrumental aptitude is required. *Two hours a week. One hour credit.*

51. INTERPRETATION AND CONDUCTING.—A consideration of the problems of organization, time-beating, program-building, and interpretation in both choral and instrumental ensemble. Prerequisite, an assurance of aptitude and membership in the University band, chorus, or orchestra. *One hour a week.*

BAND is listed under Military Science and Tactics, Course 11. 12.

Applied Courses

The University provides applied music instruction through an affiliation with the Northern Conservatory of Music in Bangor. For economy and convenience to the student, instruction in these courses is given on the campus if a sufficient number register for a course.

A maximum of eight semester hours of credit is allowed for applied music. Repetition of these courses is therefore permitted, with the requisite variation and progress in technical and literary material; but whatever number of hours is credited must be paralleled by at least an equal number of hours in music theory and aesthetics. The University endeavors to provide adequate practice opportunity for students who desire to take applied courses without credit.

VIOLIN, PIANO, ORGAN, VOICE.—Private lessons at periods to be arranged. One hour lesson weekly, $45.00 the semester. *Two credit hours.* One-half hour lesson weekly, $22.50 the semester. *One credit hour.*

INSTRUMENTAL AND VOCAL ENSEMBLE.—Group lessons at periods to be arranged. One hour lesson weekly. Fee, duet, $22.50 per person the semester; trio, $15.00 per person the semester; quartet, $11.25 per person the semester. *One credit hour* in each case.

To meet further demands, instruction in the various orchestral instruments can be provided on a similar basis.

The practice requirements are two hours daily for six days each week for hour lessons, one hour for half-hour lessons. The semester is fifteen weeks for applied music study. Practice facilities are provided on the campus.

For the use of the University instruments, practice fees are charged as follows for a daily practice hour: piano, $2.50 a semester; organ, $5.00 a semester.

PHILOSOPHY

PROFESSOR LEVINSON

Philosophy is the systematic attempt to think our way to the solution of those problems that arise when we ask such general questions as those concerning the meaning of the world, the origin and destiny of human life, its standards and values, the sources and limits of our genuine knowledge, the principles that underlie valid reasoning, and the sources and significance of the sense of beauty. While philosophy is ordinarily approached directly by way of the history of man's attempt to solve these problems (see Pl 3; 4), or through a study of the principal problems or types of philosophy (see Pl 5. 6), opportunity is offered to various classes of students to approach it from the standpoint of their work in other fields (see Pl 11. 12).

3; 4. HISTORICAL INTRODUCTION TO PHILOSOPHY.—An approach to philosophy through a first-hand acquaintance with its literature. Reading and interpretation of selections from the philosophical classics of the western world, from Plato to William James. Given in 1937-38 and alternate years. *Three hours a week.*

5; 6. PERSONAL PHILOSOPHY.—The student is invited to make a provisional statement of his more general beliefs about the nature of the world and man, and, in the light of assigned readings and class discussions, to formulate a working philosophy of life. Given in 1938-39 and alternate years. *Three hours a week.*

8. THE TECHNIQUE OF THINKING.—Exercise in the logical analysis of argument and in the discrimination of "straight" from "crooked" thought. The materials employed in the course are drawn largely from the press and from the literature of the social sciences. *Two hours a week.*

9; 10. ETHICS.—A critical examination of various competing conceptions of the good life. Special attention will be given to problems of contemporary society: professional and business ethics; democracy and its rivals; religion. *Three hours a week.*

11. 12. TOPICS IN PHILOSOPHY.—This course is restricted to a limited number of properly qualified upperclassmen, whose needs in philosophy are not satisfied by any of the other courses offered by the Department. Topics associated with the student's major subject will be studied through tutorial conferences, assigned readings, and reports. No work in philosophy is prerequisite. *Two or three hours a week.*

101. 102. SEMINAR.—An individually arranged program of tutorial instruction for students offering twelve hours of work in the Department, or the equivalent.

PHYSICS

Assistant Professor Bennett (Acting Department Head); Professor Fitch; Associate Professor Crofutt; Assistant Professor Larsen; Dr. Williams; Mr. Morris; Mr. Blackmer

Physics is that science which is concerned with the general laws and principles by which the phenomena of the physical world may be rationally understood. The various branches of this broad subject are unified by an abstract concept called energy, whose various manifestations and transformations become the general concern of the student in this field of learning, from both a theoretical and an experimental point of view.

The science serves as the basis for all branches of engineering and is applied to numerous other phases of everyday life, but applications can never wholly absorb or displace those underlying facts and theories on which they depend. Physicists are being absorbed in increasing numbers in industry as well as in the government bureaus and privately endowed research foundations. Trained physicists also find their places today in the larger hospitals where X-ray, radiation therapy, and allied techniques are of the utmost value.

To the person who wishes to apply the subject in any of the above ways, or who wishes to teach in the university or the secondary school, a basic training in the subject is the first requirement. Such training is offered by the general and intermediate courses Ps 1a, 2a, or 1b; 2b, and (17; 18, 19; 20) or (21, 22, 24). These courses should be supplemented by a balanced program of mathematics and chemistry. Following this, a suitable number of the more advanced courses in physics should be taken.

For the intelligent layman who does not wish to be without at least a superficial knowledge of the physical world in which he lives, courses of the more descriptive variety are also offered (Ps 3, Ps 10).

The science requirement of the College of Arts and Sciences is met by Ps 1a; 2a, or Ps 1b; 2b, and partially met by Ps 3.

1a; 2a. General Physics.—This course covers the field of First-Year General College Physics. It is intended for the general student and will satisfy the science requirement in the College of Arts and Sciences, as well as the premedical and predental requirements. Emphasis is placed upon the fundamental relations in mechanics, sound, heat, electricity, magnetism, and light. *Two lectures; one recitation,* and *one two-hour laboratory period a week. Four credit hours.* Mr. Bennett, Mr. Larsen, Mr. Williams

1b; 2b. General Physics.—This is a course in First-Year General College Physics which meets the requirements of the College of Technology.

With the extra recitation per week, this course places more emphasis on the solution of problems than does 1a; 2a. A knowledge of algebra and geometry is prerequisite. *Two lectures, two recitations,* and *one two-hour laboratory period a week. Five credit hours.*

MR. BENNETT, MR. CROFUTT, MR. LARSEN, MR. WILLIAMS, MR. MORRIS, MR. BLACKMER

3. DESCRIPTIVE PHYSICS.—This course treats in non-mathematical language and by demonstrations in the classroom the more important topics in the general field of physics. It is designed to meet the needs of those students who do not expect to continue with other courses in the department and should appeal to students who are interested primarily in other fields. Frequent references are made to the lives and theories of those men who have contributed most to the advancement of physics. No previous knowledge of physics is assumed. *Three lecture-demonstrations a week. Three credit hours.* MR. CROFUTT

10. METEOROLOGY.—A study of the earth's atmosphere, its composition and movements. Attention is given to atmospheric conditions accompanying changes in weather, a knowledge of which is essential for making weather predictions. The modern aspects of meteorology are also considered. *Three hours a week. Three credit hours.* MR. LARSEN

17. 18. INTERMEDIATE PHYSICS.—This course follows 1a; 2a or 1b; 2b to complete a two-year program in general college physics. A more analytical treatment of many of the topics already introduced in the first course is presented. This two-year program provides adequate preparation for advanced work in physics or for secondary school sicence teaching, and at the same time provides a suitable course for a science or mathematics major. Course 19, 20 is recommended as a companion course. Course 1a; 2a or 1b; 2b is prerequisite. *Three hours a week. Three credit hours.* MR. BENNETT

19. 20. INTERMEDIATE LABORATORY PHYSICS.—A laboratory course intended to supplement Course 17. 18. The experiments are selected from those regularly performed in Courses 21 (22), 23, 24, with the addition of a few experiments in sound and light. Course 17. 18 is required concurrently or as a prerequisite. *Two hours a week. One credit hour.*

MR. LARSEN, MR. CROFUTT

21 (22). MECHANICS AND HEAT LABORATORY.—A laboratory course on the intermediate level designed primarily to meet the needs of the College of Technology. Fundamental problems in equilibrium, linear and rotary dynamics, vibratory motion, elasticity, viscosity, thermometry, pyrometry, heat of combustion, thermal conductivity, and elementary thermodynamics are studied

from the experimental viewpoint. Course 1a; 2a or 1b; 2b is prerequisite. *Four hours a week. Two credit hours.* MR. LARSEN

24. ELECTRICAL MEASUREMENTS.—An intermediate laboratory course designed primarily to meet the needs of the College of Technology, covering theories and practices in the measurement of electrical and magnetic quantities. It includes a study of current, resistance, difference of potential, capacitance, magnetic flux, self and mutual inductances, impedance, vacuum tube characteristics, and frequency of alternating currents. Open to those who have completed Course 1a; 2a, or 1b; 2b and who have a working knowledge of calculus. Laboratory, *four hours a week. Two credit hours.* MR. CROFUTT

32. PHOTOGRAPHY.—This course deals with fundamental theories and techniques and should be of practical value to those considering any line of activity which involves photography. It should also be of interest to those who pursue photography as a hobby or as a form of artistic expression. The work includes: construction and use of various types of cameras; lenses; exposure and exposure meters; emulsions; filters; artificial lighting and copying; contact and projection printing; dark-room practice. *Two lectures and one two-hour laboratory period a week. Three credit hours.* MR. CROFUTT

55; 56. ELECTRICITY AND MAGNETISM.—An advanced course in which the physical and mathematical relations involved in electrostatics, magnetism and direct-current phenomena are considered the first semester. The second semester is devoted largely to alternating currents. Course 17. 18 or its equivalent, and a working knowledge of the calculus are required. *Three hours a week. Three credit hours.* MR. BENNETT

58. MATHEMATICAL PHYSICS.—An advanced course in selected theoretical aspects of physics. Mathematical methods are applied to physical principles. Open to students who have completed Course 17. 18 or its equivalent and who have a working knowledge of the calculus. Given in 1937-38 and alternate years. *Three hours a week. Three credit hours.* MR. WILLIAMS

59. SOUND.—A course dealing with vibrating systems, sources of sound, transmission of sound, its reception and transformations. Attention is given to speech and hearing, sound ranging, architectural acoustics, reproduction of sound, noise reduction, and musical instruments. Open to those who have completed Course 1a; 2a, or 1b; 2b and have a working knowledge of the calculus. Offered in 1938-39 and in alternate years. *Three hours a week. Three credit hours.* MR. CROFUTT

61. HEAT.—A course dealing with the measurement of temperature, specific heat, thermal expansion, conduction, convection, radiation, change of

state, and the production of high and low temperatures. Open to students who have completed Course 1a; 2a, or 1b; 2b and who have a working knowledge of the calculus. Offered in 1938-39 and in alternate years. *Three hours a week. Three credit hours.* MR. CROFUTT

66. VACUUM TUBES AND THERMIONIC PHENOMENA.—This is a course covering thermionic emission and electronic phenomena in vacuum. In addition to a theoretical treatment of the subject, the physics of vacuum tubes as rectifiers, amplifiers, modulators, and detectors is treated in a practical manner. Open to advanced students who are familiar with the calculus and who have completed Course 17. 18 or its equivalent. Offered in 1937-38 and in alternate years. *Three hours a week. Three credit hours.* MR. LARSEN

68. MODERN PHYSICAL THEORIES.—An advanced course embracing a study of electrical phenomena in gases, spectra, X-rays, thermionic emission, photo-electric effects, radioactivity, atomic structure, and electrical phenomena in solids. Some attention is given to quantum and wave mechanics. Open to students who have completed Course 17. 18 or its equivalent and can use the calculus. Offered in 1938-39 and alternate years. *Three hours a week. Three credit hours.* MR. CROFUTT

73. LIGHT.—An advanced course in the study of light covering its velocity of propagation, reflection, refraction, diffraction, and polarization. It also includes a study of optical instruments. Open to advanced students who can use the calculus and have credit for 17. 18 or its equivalent. Given in 1937-38 and alternate years. *Three hours a week. Three credit hours.*
MR. WILLIAMS

81. 82. ADVANCED LABORATORY PHYSICS.—In this course selected advanced experiments are performed by the student under the supervision of some member of the staff. Opportunity is also given to develop original ideas and to construct original apparatus as part of senior thesis work. Courses 19. 20, or 21 (22) and 24 are prerequisite. Credits arranged.
MEMBERS OF THE DEPARTMENTAL STAFF

97. 98. PHYSICS SEMINAR.—Credits arranged. Topic, 1937-38: "Quantum Mechanics." MEMBERS OF THE DEPARTMENTAL STAFF

101. 102. SPECIAL LABORATORY.—An original investigation, open only to graduate students. It is not expected in this course that the student will confine his work to a minimum number of hours a week. Credits arranged.
MEMBERS OF THE DEPARTMENTAL STAFF

PSYCHOLOGY

Professor Dickinson; Associate Professor E. N. Brush;
Dr. Glanville; Dr. White; Dr. L. H. Brush

Psychology includes a study of mind and of modes of behavior. It offers the student an opportunity to acquaint himself at first hand with the fundamental laws of the psychophysical organism. Through a study of the child, the normal adult, and the abnormal individual, it enables him to gain an insight into personality development and the problems of human adjustment. Through experience with psychological tests and the techniques of testing he comes to a more practical understanding of intelligence.

In its ramifications psychology borders upon the natural as well as the social sciences. It is most closely allied, however, with education, zoology, economics, sociology, and philosophy.

Some of the occupations which courses offered in the department lead towards are: advertising and selling, clinical psychology, personnel work in business and industry, psychiatric and general social work.

Students may combine a major in Psychology with any other of the Social Sciences: Government, History, Philosophy, or with Education or Zoology.

Psychology 0. The Technique of Effective Reading.—An analysis of the individual student's reading habits is followed by an intensive program of training designed to increase efficiency in reading. Limited to twenty-five students. *Elective. No credit. Two laboratory periods a week.*

Mr. Brush, Mr. White

1; 2. General Psychology.—A basic course designed to give a general introduction to the field of psychology and to relate its subject matter to everyday life. A systematic survey of such topics as learning and memory, thinking, imagination, intelligence, personality, motivation, observation, the development and the physiological basis of behavior; a brief discussion of some of the special fields of psychology, e.g., applied, child, social, abnormal. *A weekly laboratory period.* Classroom, *two hours a week;* laboratory, *two hours a week. Three credit hours.* The Departmental Staff

3. Applied Psychology.—Psychology applied to industry, business, advertising, salesmanship, and other fields. The application of psychological methods and tests in the selection and training of workers. Open only to Technology students in Mechanical Engineering. *Three hours a week.*

Mr. Brush

12. Advertising and Selling.—A course designed to acquaint the student with the psychological principles involved in advertising and selling.

Practical application of these principles in rewriting advertisements appearing in newspapers and magazines, and in the developing of an advertising and selling campaign in relation to an actual product. Prerequisite, Course 1, or permission of the instructor. *Three hours a week.* MR. DICKINSON

66. EDUCATIONAL PSYCHOLOGY.—The application of psychological facts, principles, and points of view to education. Consideration of growth during the school years, with attention to social, emotional and intellectual development. Learning in schools; its nature and control, its permanence and effects on attitudes, interests and appreciations; the problem of transfer of training. Prerequisite, Course 1; 2. *Three hours a week.* MR. BRUSH

67. PSYCHOLOGY OF CHILDHOOD.—A study of the mental growth of the child to twelve years of age. Native equipment, environmental influences, the development of motor and behavior patterns, speech, inference, judgment, etc., are given consideration. Modern experimental techniques of child study are discussed. Five thousand feet of motion pictures are available. Prerequisite, Course 1, 2, with a grade of C or better. *Three hours a week.*
MR. DICKINSON

68. PSYCHOLOGY OF ADOLESCENCE.—A study of the physical and mental changes which occur at this period. Learning, memory and reasoning, emotional maturing, personality development and disturbances of personality are among the items considered. Prerequisite, Course 1; 2. *Two hours a week.*
MR. BRUSH

69; 70. EXPERIMENTAL PSYCHOLOGY.—The first semester aims to acquaint the student with methods in the qualitative study of experimental problems and orient him in the objective approach to problems. In the second semester emphasis is placed upon quantitative methods and the statistical treatment of social-psychological data. Designed primarily for psychology majors. Prerequisite, Course 1; 2. *Three hours a week.* MR. GLANVILLE

71. 72. ABNORMAL PSYCHOLOGY AND MENTAL HYGIENE.—A study of mental abnormalities followed by a study of the normal mentality, with a view to a better understanding of educational practice and the problems of human adjustment. Through the cooperation of Dr. C. J. Hedin, superintendent, five clinics are conducted at the Bangor State Hospital on the following Tuesday afternoons from two until four o'clock: October 18, November 1, 15, 29, December 6. Attendance at the clinics is required. Prerequisite, Course 1; 2, with a grade of C or better. *Three hours a week.*
MR. DICKINSON

75. SOCIAL PSYCHOLOGY.—The development of social behavior in the individual; personality in its relation to the social environment; social atti-

tudes; forms of social interaction; the psychological basis of propaganda, crowd behavior and other forms of group activity. Prerequisite, Course 1; 2. *Three hours a week.* Mr. Brush

81; 82. Mental Measurement.—Training in the use of psychometric methods, with opportunity for their application to practical or research problems. During the first semester the emphasis is upon technical training, during the second upon the application to problems. Primarily for seniors and graduate students who plan to enter the teaching profession, social service, or personnel work. Prerequisite, Course 1; 2. *Three hours a week.*

Mr. Brush

91. 92. Problems in Psychology.—Primarily for graduate students and seniors with a rank of B or better. The self-active student has here an opportunity to select and attack particular psychological problems with the benefit of criticism and suggestions from the instructor at stated intervals. Admission by consent of the instructor. *Hours arranged.*

Mr. Dickinson and Staff

93. 94. Seminar in Psychology.—Advanced work for graduate students, psychology majors, and other interested and qualified persons. In successive semesters the subject matter includes history of psychology; systems and schools of psychology; current psychological experimental literature; etc. Required of all Psychology majors; prerequisite for others, permission of the instructor. *Two hours a week.* Mr. Dickinson

PUBLIC SPEAKING

Professor Bailey; Assistant Professor Bricker; Dr. Runion

Courses in speech are a great aid both to the professional and non-professional man. The teacher, lawyer or minister can hardly dispense with a knowledge of how to construct and effectively deliver a speech. Business people find a knowledge of public speaking an aid to them whether they are executives or salesmen. In a word, to be a good speaker is a great help towards leadership in any chosen field.

Drama, on the other hand, while teaching students many of the very essential necessities of voice, posture, ease, and diction, creates a love for the beautiful, and develops an appreciation of one of our greatest arts. No more interesting or cultural employment of leisure time perhaps can be suggested than becoming associated with the drama as playwright, producer, actor, scenic designer or lighting technician. A full enjoyment of dramatic art demands a knowledge of the technical principles upon which it is founded.

Students interested in public speaking as a practical art may major in Speech; those interested in public speaking as a fine art may major in Drama.

The necessary hours for a major in Speech are made up by the coöperation of the Departments of English and Psychology and in Drama by the cooperation of the Department of English.

Students who major in Speech are expected to write and deliver a forty-minute address before some civic organization.

Students who major in Drama must either give a recital of approved standard, or direct, or take a major role in, a dramatic production.

Courses in Speaking

1 (2). PUBLIC SPEAKING.—A basic course in public speaking. The student is taught to organize material and to deliver short extemporaneous speeches. Sections are organized chiefly according to the college in which the student is enrolled, and each section is conducted according to the needs of the group. *Two hours a week.* MR. BAILEY, MR. BRICKER, MR. RUNION

3 (4). DEBATING.—Questions of state, national, and international importance are debated in class. Students expecting to do advanced work in debating are advised to take this course as early in their college career as possible. *Two hours a week.* MR. RUNION

6. PERSUASIVE SPEECH.—Course 6 is a continuation of Course 1. The object of the course is to train students to organize their material persuasively, to continue extemporaneous speaking, to give the student practice in organizing and delivering oral reports, and to train the student in the principles of effective conference speaking. Prerequisite, Course 1 (2). *Two hours a week.* MR. BAILEY, MR. BRICKER, MR. RUNION

12. BUSINESS AND PROFESSIONAL SPEAKING.—A course designed to help the student who plans to enter business or professional life. Attention is given to the sales talk, the after-dinner speech, the speech of explanation and demonstration, the conference discussion, and radio and telephone speaking. Opportunity is provided for the exceptional student to appear before business groups in neighboring towns. Prerequisite, four hours of speech courses. *Two hours a week.* MR. BAILEY

20. ADVANCED DEBATING.—A course designed to meet the need of the student who desires advanced work in debate or who wishes to direct or teach debating or take part in intercollegiate debate. An individual program is worked out for each student enrolled. Prerequisite, four hours in speech courses and permission of the instructor. *One to three hours a week.* MR. RUNION

42. Radio Speaking.—A consideration of speech and dramatic programs best suited for radio speaking; speaking, debate, interpretative reading, the radio play. Qualities necessary for good radio announcing, with emphasis on voice, diction, and enunciation. Opportunities whenever possible on radio programs. *Two hours a week.* Mr. Bailey

45 (46). Advanced Public Speaking.—A study of representative orators in both England and America, an analysis of the structures of the oration and the rhetoric of oratory, a review of several historic debates and lyceum lectures, and the preparation and delivery of an original address. Prerequisite, four hours in speech courses. *Two hours a week.* Mr. Bailey

Speech Correction and Vocal Development

0. Speech Correction.—Open to students with speech defects. The method of instruction is largely individual. *No credit.* Mr. Runion

47. Speech Pathology.—A course designed to acquaint the student with symptoms, causes, and treatments of disorders of speech and voice. Stuttering, articulatory defects, aphasia, and voice disorders are included. Prerequisite, Course 1 (2) or 7 (8). *Two hours a week.* Mr. Runion

48. Vocal Development.—The aims of this course are to improve the voice and to give training in distinguishing correct and defective sounds. The approach is by breathing and vocal exercises and nonsense dictation tests (the phonetic symbols of the International Phonetic Association are used). Prerequisite, Course 1 (2) or 7 (8). *Two hours a week.* Mr. Runion

Courses in Expression

7 (8). Interpretative Reading.—The oral interpretation of many selections from English prose, poetry, and drama forms the basis of this course. Several selections are rendered from memory, and exercises in the use of the voice are included. This course is recommended especially to the teacher of English. *Two hours a week.* Mr. Bailey

43 (44). Platform Reading.—The interpretation of an entire play. Open only to advanced students who have shown marked ability in expression and desire to do serious platform work. This course may be repeated. The consent of the head of the Department is necessary for enrollment. Prerequisite, Course 7 (8). *Two hours a week.* Mr. Bailey

Theatre

The object in theatre study is to coördinate the various branches of theatrical arts and to create a "producing" unit. For the purpose of registration,

students should enroll under the course in theatre meeting their interests and needs. Not more than ten hours may be taken from this group without special permission.

27 (28). Elementary Acting.—A course designed to stress the principles and theory of acting. Opportunity is afforded to act in one or more plays during the semester. *Two hours a week.* Mr. Bailey

29. Scenic Design and Lighting.—The develpoment and principles of scenic design with a theoretical consideration of stage lighting, especially as it affects the stage designer. *Two hours a week.* Mr. Bricker

32. Costume.—The history of stage costuming and the principles of designing costumes for definite play characters. Conference and laboratory. Prerequisite, Course 29. *Two hours a week.* Mr. Bricker

35 (36). Make-up.—Practice in making up all types of characters. *One hour a week.* Mr. Bricker

37. 38. Theatre Projects.—Advanced work in one or more of the following fields of dramatics: acting, designing, costuming, lighting, and make-up. Prerequisite, Course 27 (28) or equivalent. Program must have the consent of the head of the Department. *Two hours a week.*
Mr. Bailey, Mr. Bricker

39 (40). History of the Stage and Stage Directing.—A course giving the student, both in theory and practice, the principles of stage directing, together with a brief history of the stage. Open only to students who have taken Course 37, 38 or by special permission. *Two hours a week.*
Mr. Bailey

ROMANCE LANGUAGES

Professor Peterson; Assistant Professor Arnold; Assistant Professor Buzzell; Dr. Vigneras; Dr. Starr; Miss Weill (Exchange Student)

The Department of Romance Languages offers in its French courses the opportunity to perfect one's self in writing and speaking the language. The more elementary courses provide primarily practice in reading; in subsequent years the structure and development of the language are set forth in the linguistic courses, while the customs and manners of the people are discussed in the classes in conversation. The chief literary works are carefully

read and interpreted, and the student is encouraged to develop independence of critical judgment. The student is thus given an opportunity through first-hand acquaintance with the language and literature of a people to establish direct relationship with its culture.

A more limited range of courses is available in Spanish, but their aim, so far as time permits, is the same as that of the work in French.

Students concentrating in French are required to elect a minimum of 22 hours in the junior and senior years. Courses 21, 22; 27, 28; 29, 30 may not be included in this number, being intended primarily for sophomores. Twelve of the 22 hours must be in literature. Major students are advised to secure some familiarity with another Romance language or to continue Latin.

Students may also concentrate in the general field of Romance Languages, electing, in the junior and senior years, a total of 22 hours of suitable courses in French and Spanish.

Students not concentrating in Romance Languages but expecting to teach them will be recommended for the teacher's certificate if they elect one year-course in literature and two year-courses in oral French. This same basic program is recommended also for those who take French with a view to diplomatic and consular service or positions in the foreign department of city banks or foreign posts in other industries. The oral work especially is suggested for those interested in art and music, secretarial work, and department store buying.

French

Basic Courses

These courses, intended for freshmen, are designed to teach the student to read at sight the French of representative authors. The material is chosen from outstanding writers of the modern period.

3; 4. Intermediate French.—Reading of narratives, with grammar review. Attention to pronunciation and exactness of translation. For students offering two units of French as an entrance requirement and for those offering three units whose preparation is inadequate for Course 5. 6. In the latter case only two hours of credit are allowed. *Four hours a week.*

Mr. Peterson, Mr. Vigneras

5. 6. Advanced French.—Reading of novels and short stories, some intensively, others more rapidly, to secure facility in the comprehension of present-day French prose. Study of idioms and word usage. Accuracy in

translation is stressed. Open to students offering three units of French as an entrance requirement and to exceptional students offering two units. *Three hours a week.* MR. PETERSON, MR. VIGNERAS, MR. STARR

GENERAL LANGUAGE AND LITERATURE COURSES

7. 8. ELEMENTARY CONVERSATION AND COMPOSITION.—Grammar review and constant drill in spoken French to acquire a practical vocabulary and achieve correct speech. Open to students who have offered three units of French for entrance or who have completed Course 3, 4. *Two hours a week.* MR. PETERSON, MR. STARR

8a. ELEMENTARY CONVERSATION AND COMPOSITION.—An intensive second-semester course covering the same material as Course 7, 8. Open to students whose previous record in the subject is above the average. *Two hours a week.* MR. STARR, MISS WEILL

9. 10 ADVANCED CONVERSATION AND COMPOSITION.—The aim of the course is to enable the student, through discussion of the customs and interests of every-day French life, to express himself readily in colloquial French. *Three hours a week.* MR. VIGNERAS, MISS WEILL

Course 5. 6 or the equivalent is a prerequisite for all courses listed below. Students who have not passed a reading test should register for Course 17. 18. Those who have passed a reading test may elect either Course 21. 22 or 27. 28 (29. 30), one of which is a prerequisite for courses in literature numbered above 40.

17. 18. RAPID READING COURSE.—A continuation of Course 5. 6 designed to promote facility in reading for those who have not passed a reading test. *Two hours a week.* MR. STARR

21. 22. THE NOVEL IN THE NINETEENTH CENTURY.—A study of the renewal of French literary inspiration by Chateaubriand and Victor Hugo and the development of the realistic novel by Balzac, Flaubert, and others. Reading of examples of both Romantic and Realistic fiction. *Three hours a week.* MR. STARR

27. 28. SOCIAL AND POLITICAL TRENDS.—The reading of modern writers dealing with trends and problems in economics, government, and other social sciences and the background of modern society. Collateral reading by the student in the field of his special interest. Offered in 1938-39 and alternate years. *Three hours a week.* MR. VIGNERAS

29. 30. CONTEMPORARY LITERATURE.—Similar in scope to Course 27. 28 but with more attention to the novel and drama. A brief review of literary

trends from 1880 to the World War, followed by an intensive study of the post-war period with emphasis upon economic, social, and political influences. Alternates with Course 27. 28; not offered in 1938-39. *Three hours a week.*

MR. VIGNERAS

MORE ADVANCED COURSES

The following courses are conducted mainly in French

45. 46. THE THEATRE IN THE NINETEENTH CENTURY.—A study of the great dramatists of modern France with introductory lectures on the development of the theatre. Reading of plays of the Romantic and Realistic schools. An effort is made to develop independent criticism of style and technique. Alternates with Course 51. 52; not offered in 1938-39. *Three hours a week.*

MR. PETERSON

51. 52. SURVEY OF FRENCH LITERATURE.—A study of the growth of French literature from the Middle Ages to the present day, with emphasis upon the important literary movements. Reading of selections, especially those representing literary forms and periods not covered in other courses. Offered in 1938-39 and alternate years. *Three hours a week.* MR. VIGNERAS

57. 58. FRENCH FOR PROSPECTIVE TEACHERS.—In the first semester, through a review of the fundamentals of grammar, the student is taught to recognize and explain common difficulties confronting the teacher in the secondary school. The second semester is devoted to a discussion of methods and problems of instruction and a study of French institutions and culture. Prerequisite, Course 9. 10. Alternates with Course 63. 64; not given in 1938-39. *Three hours a week.* MR. VIGNERAS

63. 64. FRENCH CLASSICAL LITERATURE.—A study of the leading characteristics of the seventeenth and eighteenth centuries. Reading of masterpieces of the classical dramatists, La Fontaine, Voltaire, Montesquieu, and other writers. Prerequisite, Course 45. 46. *Three hours a week.*

MR. PETERSON

Spanish

1-2. ELEMENTARY SPANISH.—A course for beginners, which includes a study of the basic principles of Spanish grammar, pronunciation exercises, dictation, oral practice, and composition, with especial attention to the mastery of verb forms and pronouns. Reading is begun at an early date, and emphasis is laid upon the acquirement of an adequate vocabulary. *Four hours a week.*

MISS ARNOLD

1a-2a; 2b. ELEMENTARY SPANISH.—Similar in content to Course 1, 2 but extends through three semesters and includes a larger amount of reading. The class begins in the second semester and is continued through the following year. *Three hours a week.* MISS ARNOLD

3. 4. MODERN SPANISH PROSE.—The principal aim of this course is to secure facility in the reading and comprehension of ordinary Spanish prose of the modern period. Certain books—novels, short stories, and plays—are studied intensively while others are read more rapidly. Review of grammar, study of idioms, and oral practice. Designed for second-year students. *Three hours a week.* MISS ARNOLD

5. 6. ELEMENTARY CONVERSATION AND COMPOSITION.—Stress is laid upon the acquisition of a practical vocabulary by means of exercises based upon Spanish newspapers. Study of the grammar and translation into Spanish. Designed for third-year students or for second-year students who are pursuing at the same time Course 3. 4. *Two hours a week.* MISS ARNOLD

7. COMMERCIAL SPANISH.—The object of this course is to acquaint the student with the forms of private and commercial correspondence and the vocabulary used in the business world. Reading of selections dealing with industrial and commercial life. Given in 1938-39 and alternate years. *Three hours a week.* MISS ARNOLD

9. 10. RAPID READING COURSE.—A continuation of Course 3. 4 designed especially to promote facility in reading. The material read, consisting largely of narratives, will be limited to the modern period. *Two hours a week.* MISS ARNOLD

57. 58. SURVEY OF SPANISH LITERATURE.—A study of the development of the various literary forms in Spain and the reading of selections from representative authors of various periods. Some attention is given to Spanish-American writers. Given in 1937-38 and alternate years. *Three hours a week.* MISS ARNOLD

The following course may be given for special reasons: 51. 52. THE NOVEL AND DRAMA.

SOCIAL SCIENCE

1; 2. SOCIAL SCIENCE.—A study of significant social problems of contemporary society. This course has three primary objectives for the student: to understand contemporary society; to relate the present scene to its historical background; and to develop a method of critical analysis. Open to Arts and Sciences freshmen. *Three hours a week.* MR. KIRSHEN

1b; 2b. Introduction to the Social Sciences.—A survey of the origins and historical development of some of the characteristic features of western civilization. Emphasis is placed on economic and political institutions as part of the rise and development of the social sciences. Open only to Home Economics students. *Three hours a week.* Mr. Kirshen

ZOOLOGY

Professor Murray; Assistant Professor Nelson; Mr. Cooper; Dr. Speicher; Miss Parshley; Mr. O'Brien; Miss Titcomb

Zoology is the branch of biological science which deals with the study of animal life. A knowledge of the general principles of zoology is prerequisite to an understanding of the relationships which exist between man and his natural environment, and serves as a basis for the study of the mental and social side of human behavior.

The Department offers curricula satisfying the requirements for admission to graduate, medical, dental, and nursing schools.

1. General Zoology.—A one-semester course in the fundamentals of zoology, illustrated by laboratory study of typical forms from the various groups of the animal kingdom. This course is designed to meet the requirements of students in the College of Agriculture. Together with Botany 2 it may be taken to fulfill the natural science requirement in the College of Arts and Sciences. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Murray, Miss Parshley, and Assistants

3; 4. Animal Biology.—A two-semester course in the fundamental principles of animal life, with laboratory study of the structure and function of organ systems in typical forms from the various groups of the animal kingdom. This course is prerequisite to all advanced courses in the Department and fulfills the natural science requirement in the College of Arts and Sciences. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Murray, Mr. Speicher, and Assistants

9. Ichthyology.—A course which deals with the characteristics of fishes, their life histories and economic importance, with particular emphasis on the fresh-water species. Lectures, supplemented by laboratory study and dissection. Prerequisite, Zoology 1 or 3; 4. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Cooper

10. Ornithology.—A course which deals with the characteristics of birds, their life histories and economic importance, with particular emphasis

on game species. Lectures supplemented by laboratory study of skins and mounted specimens, and directed field observation. Prerequisite, Zoology 1 or 3; 4. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* MR. COOPER

12. ANATOMY AND PHYSIOLOGY.—A course which takes up the general principles of animal life and the structure and function of organs and organ systems, with special emphasis placed on higher mammalian forms. Designed for students in the Department of Home Economics, but open, by permission of the instructor, to all qualified women students. Classroom, *three hours a week;* laboratory, *four hours a week. Five credit hours.*

MR. MURRAY, MR. FULLER

13. MAMMALOGY.—A course which deals with the characteristics of mammals, their life histories and economic importance, with particular emphasis on game species. Lectures supplemented by laboratory study and dissection. Prerequisite, Zoology 1 or 3; 4. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* MR. MURRAY

14. ANIMAL PARASITOLOGY.—This course deals with the identification of the more important parasites, the study of their life histories, and the prevention, control, and cure of the diseases involved. Special emphasis is given to the parasites affecting game animals. Prerequisite, Zoology 1 or 3; 4. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.* MR. NELSON

15; 16. COMPARATIVE ANATOMY.—A comparative study of the structure, origin, and history of the vertebrate organ-systems. Prerequisites, Zoology 1 and Botany 2, or Zoology 3; 4, passed satisfactorily. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.*

MR. NELSON, MR. O'BRIEN

18. VERTEBRATE EMBRYOLOGY.—A study of the development and formation of tissues, organs, and organ-systems in vertebrates. Prerequisite, Course 15; 16, passed satisfactorily. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* MR. MURRAY

19. FISH CULTURE.—This course deals with the practical problems involved in the rearing of fish. Prerequisites, Zoology 9 and Entomology 26. First nine weeks of the first semester. Lecture, *one hour a week;* laboratory, *three hours a week. One credit hour.* MR. COOPER

20. FISH CULTURE.—Continuation of 19. Lecture, *two hours a week;* laboratory, *three hours a week. Three credit hours.* MR. COOPER

21. ANIMAL ECOLOGY.—This course deals with the ecology of game animals. Prerequisite, Zoology 10 and 13. First nine weeks of the first semester. Lecture, *two hours a week. One credit hour.* MR. COOPER

22. Animal Ecology.—Continuation of 21. Lecture, *three hours a week. Three credit hours.* Mr. Cooper

37; 38. General Physiology.—A study of the physico-chemical forces of the vital processes of plants and animals; the more special phenomena in higher animals, with their bearing on human physiology. Prerequisites, two years of chemistry, one year of physics, and either Zoology 3; 4, or Zoology 1 and Botany 2. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Fuller

41. Histology.—A study of animal tissues and of the methods of preparing microscopic slides. Admission by arrangement with the instructor. Prerequisite, two years of zoology. Classroom, *one hour a week;* laboratory, *six hours a week. Three credit hours.* Mr. Nelson

44. Biological Theories.—A discussion of the more important generalizations concerning the biological sciences designed to portray the growth and development of biological knowledge as a phase of intellectual culture, and to indicate the value of such knowledge to human welfare. Open only to zoology majors in the junior and senior years and to others upon the written approval of the instructor. Classroom, *two hours a week. Two credit hours.* Mr. Nelson

47. 48. Problems in Zoology.—Open to juniors and seniors who may have special interest and special qualification in some branch of zoology. The approval of the instructor concerned must be obtained before registering for this work. *Credit, arranged.* Mr. Murray

55. 56. Zoological Seminar.—A consideration of the historical and current literature which expresses the trends of thought in biological science. Required of all senior majors and graduates majoring in zoology. Classroom, *one hour a week. One credit hour.* The Departmental Staff

Opportunity is given for graduate work in the various phases of zoology under the direction of the members of the Department. Students with adequate preparation may register by special written permission for the following courses:

105. 106. Problems in Zoology.

111. 112. Problems in Physiology.

School of Education

GENERAL INFORMATION

The School of Education offers professional training to secondary teachers, superintendents, principals, and supervisors. Students will ordinarily enter with Junior standing, having had the first two years of work in either a liberal arts college or a normal school. Those with a different type of training may enter as special students until Junior standing is attained.

ADMISSION

Students in the College of Arts and Sciences

Those students in the College of Arts and Sciences of the University of Maine who plan to teach are given the opportunity to transfer to the School of Education at the beginning of their junior year. Such students should take the regular course as prescribed by the College of Arts and Sciences during the freshman and sophomore years, including in particular the course in General Psychology and such basic courses in other fields as will lay the foundation for a field of concentration.

At the beginning of the sophomore year, such students should register their intention to teach in the office of the Dean of the School of Education, and secure his approval as well as the approval of the Dean of the College of Arts and Sciences for their courses of study.

To be admitted to the School of Education students must have made a grade of C or better in at least three-fourths of their entire work during the freshman and sophomore years.

These students will be candidates for the degree of Bachelor of Arts in Education on the completion of their program in the School of Education.

Normal School Graduates

Students in the normal schools who wish to qualify for the Maine secondary-school teacher's certificate should plan to transfer to the University at the end of their second year at the normal. Such students who rank in the upper half of their class and are recommended by their principal, may be ad-

mitted to the School of Education with full Junior standing, and may graduate on the satisfactory completion of two years of work.

Graduates of the three-year courses in the normal schools, who rank in the upper half of their classes and are recommended by their principal, may be admitted to the School of Education with Senior standing and may graduate on the satisfactory completion of one year of work. This program will not, however, qualify one for the secondary-teacher's certificate.

All normal-school graduates will be expected to meet the requirement of a field of concentration in academic subjects, except that those who plan to enter administrative or supervisory work, or to remain in elementary school work, may be permitted to take this work in Education and Psychology. In either case any work previously taken at the normal school which lies within the field chosen will be given due credit toward the requirements.

Normal-school graduates who are interested in entering the School of Education should request their principal to send a transcript of their record together with a statement giving their class rank to the Director of Admissions of the University. These should be accompanied by a recommendation of the candidate by the principal.

Students who come from the normal schools will ordinarily be candidates for the Bachelor of Science in Education degree.

Graduates of other types of teacher-training institutions will be considered on their merits as special cases.

Commercial Education

An arrangement has been made with the State Department of Education whereby graduates of the teacher-training departments of approved commercial schools may receive appropriate credit toward the degree of Bachelor of Science in Commercial Education. For further information inquiries should be addressed to the office of the School of Education.

GRADUATION REQUIREMENTS

A total of 125 semester hours of college work is required for graduation. Of this total, approximately 24 hours will be required in Education and Psychology, and 40 to 50 hours in the field of concentration, all of which must be carried with a grade of C or better.

In addition, three-fourths of all work counted toward a degree must be completed with a grade of C or better, as well as three-fourths of all work done while a student of the School of Education.

ence. The amount permitted will be in proportion to the total amount of time spent at the University.

DEGREES

(1) Bachelor of Arts in Education. This degree will be given to students who do the first two years of work in the College of Arts and Sciences, or the equivalent thereof, meet their entrance requirements, and their curricular requirements for the first two years. Candidates for this degree will be required to complete a minimum of 40 to 50 hours in a group of related academic subjects which are commonly taught in the public schools, with a grade of C or better.

(2) Bachelor of Science in Education. This degree will be given to students who are admitted from normal schools with advanced standing. Requirements for the degree will include a field of concentration in the academic subjects as for the B.A. degree, and the same professional courses. In meeting both these requirements, however, due credit will be given for the courses which have been previously taken in the normal-school course.

(3) Bachelor of Science in Commercial Education. This degree has been established for graduates of approved teacher-training departments of commercial schools in Maine, who transfer to the School of Education on the completion of their course and complete the course approved for this degree.

(4) Bachelor of Science in Fine Arts Education. This degree is awarded to students who have completed the combined course of study at the Portland School of Fine and Applied Art and Westbrook Junior College and the final year of work as prescribed at the University of Maine.

Courses of Instruction

Courses designated by an odd number are given in the fall semester, those designated by an even number, in the spring semester.

When a course is offered in the first semester and also repeated in the second, it is designated by two numbers, the second of which is in parenthesis.

A period between the numbers designating a two-semester course indicates either semester may be taken for credit.

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are primarily for upperclassmen and graduates; courses numbered above 100 are primarily for graduates.

For courses in Psychology, see Department of Psychology in the College of Arts and Sciences.

29 (30). Supervised Student Teaching.—A course in student teaching in academic subjects. Open to a limited number of seniors recommended by the Dean of the School of Education and approved by the heads of the academic departments. Preference is given to those who have completed Education 77 or 78. *Five hours a week. Three credit hours.*

Mr. Jackman

29a. Supervised Teaching in English.—Supervised tutoring of small groups of freshmen deficient in the mechanics of composition. Weekly conferences with the instructor in charge. Open to qualified seniors whose major subject is English. *Two class hours weekly, first or second half semester. One credit hour.* Mr. Jackman, Mrs. Crandon

43 (44). Character Education.—A study of the nature of character and a critical appraisal of the means employed to cultivate it in young people with reference to theories of mental hygiene and progressive education. Prerequisite, Psychology 1, 2. *Three hours a week.* Miss Wilson

49 (50). Education Seminar.—This course is required of seniors in education one semester, and is designed to help integrate the various courses in education for the comprehensive examination. *Two hours a week.*

Departmental Staff

51. History of Education in the United States.—Evolution of education, educational institutions, school systems and practices of the American people. Open to juniors and seniors. *Three hours a week.*

Miss Chadbourne

52. History of Education in Maine.—A study of the evolution of the educational system in the State from its earliest period to the present

time. Open to juniors and seniors. Not given in spring semester 1937-38. *Three hours a week.* MISS CHADBOURNE

53. HISTORY OF ANCIENT AND MEDIEVAL EDUCATION.—Historical analysis and interpretation of the more important elements in modern education derived from the Hebrews, Greeks, Romans, Middle Ages, and Renaissance. Open to juniors and seniors. *Three hours a week.* MISS CHADBOURNE

54. HISTORY OF MODERN EDUCATION.—Evolution of present-day educational theory; institutions and practices of modern civilizations from the time of the Reformation up to the present. Open to juniors and seniors. *Three hours a week.* MISS CHADBOURNE

56. MAINE SCHOOL LAW.—The purpose of this course is to present the present-day Maine school law and the steps by which it has been evolved. Primarily for seniors and graduate students. To be given in the spring semester of alternate years. *Two hours a week.* MISS CHADBOURNE

59 (60). PRINCIPLES OF SECONDARY EDUCATION.—A course in the application of the principles of education with special reference to the problems of high-school teaching. The aims of secondary education in a democracy in terms of skills, knowledges, tastes, and ideals which are demanded in modern life. Primarily for juniors and seniors. Open to sophomores by permission. *Three hours a week.* MR. LUTES

61. SCHOOL ADMINISTRATION.—The general problems of school organization and administration in the United States. Primarily for seniors. Open to others by permission. *Three hours a week.* MR. LUTES

62. SECONDARY SCHOOL ADMINISTRATION AND SUPERVISION.—A practical course for those who are looking forward to positions as high-school principals or supervisors. Problems of organization, teacher selection and rating, improvement of teachers in service, salary schedules, extra-curricular activities, testing programs, and techniques of supervision will be emphasized. Primarily for seniors. Open to others by permission. *Three hours a week.* MR. LUTES

63. JUNIOR HIGH SCHOOL EDUCATION.—The course presents a theory of the junior high school based upon the psychology of adolescence, and shows the consequences of such theory in the formation and treatment of curriculum. Open to juniors and seniors. Given in 1939-40 and alternate years. *Two hours a week.* MR. JACKMAN

65 (66). EDUCATIONAL MEASUREMENTS.—An introduction to educational measurements including principles of measurements, informal and standardized educational tests, group mental tests, and the uses of elementary statistics in educational measurements. Open to juniors and seniors. Class-

room, *two hours a week;* laboratory, *two hours a week. Three credit hours.* MR. CRAWFORD

68. EDUCATIONAL AND VOCATIONAL GUIDANCE IN SECONDARY SCHOOLS.—The aim is to present to prospective teachers the general problem of guidance in junior and senior high schools, with especial reference to the vocational phase, organization for guidance, necessary materials and techniques of counseling. Open to juniors and seniors. *Three hours a week.* MR. JACKMAN

71. PSYCHOLOGY OF SECONDARY EDUCATION.—A study of the adolescent age and its characteristics. Psychological principles which determine the scope and character of secondary education. Open to students who have passed Psychology 1, 2 with a grade of C; to others by permission. *Three hours a week.* MR. LUTES

74. EXTRA-CURRICULAR ACTIVITIES IN THE SECONDARY SCHOOL.—This course is designed to acquaint the prospective high-school teacher with the nature and scope of non-academic cultural and recreational activities related to the needs of adolescence, and to aid the teacher in developing a technique for their promotion, and for their correlation with the usual academic courses. Given in 1938-39 and alternate years. *Two hours a week.* MR. JACKMAN

75. TEACHING THE SOCIAL STUDIES IN SECONDARY SCHOOLS.—The purpose of the course is to acquaint the prospective teacher of the social sciences with a point of view and vital methods of presentation that will tend to make these subjects effective in the everyday problems of living. Open to juniors and seniors. Given in 1939-40 and alternate years. *Two hours a week.* MR. JACKMAN

77 (78). PRINCIPLES AND METHODS OF TEACHING IN SECONDARY SCHOOLS.—A general course in methods for prospective high-school teachers. Open to seniors and juniors who have had General Psychology. *Three hours a week.* MR. JACKMAN

81. SUPERVISION IN THE ELEMENTARY SCHOOL.—The theory of supervision in general and specific methods of supervision of the prominent elementary school subjects will be considered. Open to normal-school graduates, and students with teaching experience. Others by permission. *Two hours a week.* MR. CRAWFORD

84. ADMINISTRATION OF THE ELEMENTARY SCHOOL.—A course for prospective superintendents and elementary school principals. Open to normal-school graduates and students with teaching experience; to others by permission. *Two hours a week.* MR. CRAWFORD

95. 96. PHILOSOPHY OF EDUCATION.—A course for seniors and graduate students designed primarily for the reading and discussion of conflicting

factors in education with a view to their criticism and coördination. Not given in spring semester 1937-38. *Two hours a week.* Miss Chadbourne

97. 98. Current Problems in Education.—Each student is assigned special problems in the field of education. Primarily for majors in education. Open by permission to others. Seniors only. *Two hours a week.*
Mr. Lutes and Staff

105. Methods of Research in Education.—A course in principles and techniques of educational research. Designed primarily for graduate students writing theses in education. Opportunity will be afforded to use thesis problems to illustrate the principles and techniques emphasized in the course. This course will be required of graduate students majoring in education. *Two hours a week .* Mr. Lutes

College of Technology

GENERAL INFORMATION

The College of Technology provides technical instruction in chemistry, various branches of engineering, engineering physics, and pulp and paper technology. The various engineering curricula have been arranged to fit the needs of most students. Although not stated in the outline of courses, bands of electives have been arranged for the student having decided aptitudes or preference, so that a sequence of studies in any one of several groups of non-technical subjects, which will especially train him for work in those fields in which he is interested, may be pursued. These elective groups are: (1) mathematics and science, (2) economics and psychology, (3) history, psychology, and sociology, (4) foreign language, (5) literature.

Those students showing marked inventive or research abilities are guided to studies in mathematics and science; those with tendencies for commercial or managerial work are advised to elect the second or third group; and for the students with strong preference for language or literature, the fourth and fifth groups are provided.

Orientation lectures, which engineering freshmen are required to attend, and conferences with faculty advisers during his first year are designed to assist the freshman in the final selection of his course.

Under each of the curricula described below is given a tabulated statement of the subjects pursued and the amount of work required. The College comprises:

Chemical Engineering Curriculum
Chemistry Curriculum
Civil Engineering Curriculum
Electrical Engineering Curriculum
Engineering Physics Curriculum
General Engineering Curriculum
Mechanical Engineering Curriculum
Pulp and Paper Technology Curriculum

The following requirements for graduation are common to all curricula in this college:

1. A total of 143 semester hours exclusive of Military Training 1, 2, 3, and 4, and physical training. Three of these hours may be for thesis. Eight

credit hours may be allowed for advanced military. Of the courses required for graduation, in which letter grades are given, 105 hours must be passed with a grade of C or above; or, in the case of those students who are excused from Military or who enter with advanced standing from other institutions, 70 per cent of the credit hours offered for graduation, in which letter grades are given, must be passed with a grade of C or above. This ratio of hours should be maintained throughout the course from the beginning.

2. Drawing, four semester hours.

3. Language: English and Public Speaking, twelve semester hours with a minimum of two semester hours and a maximum of four semester hours of Public Speaking.

4. Mathematics, eighteen semester hours.

5. Military science, seven semester hours. Physical Training, two years.

6. Science: Chemistry, eight semester hours; Physics, ten semester hours.

7. Comprehensive Examinations:

Comprehensive examinations for sophomores are given at the end of the sophomore year and used as a guide, in conjunction with the actual student grades, to determine fitness to undertake the professional studies of the junior and senior years.

A comprehensive examination, which is given to all seniors, must be passed to the satisfaction of the major department.

At graduation in any of these curricula the student receives the degree of Bachelor of Science.

Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis, he may receive the degree of Master of Science. Five or more years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive a professional degree.

Honors Course

Attention is called to the tutorial honors course which is open to superior students in engineering who may desire to supplement their field of concentration by study under individual tutorial guidance. A fuller description of this course is to be found at the beginning of the section devoted to General Courses.

Course Expenses

The following statement about the expenses incurred by students in the College is intended to supplement the material contained in the section on expenses, beginning on page 66.

For College of Technology students the minimum and maximum course expenses (includes required equipment, books, and supplies) are indicated in the following table:

	Fall Semester	Spring Semester
Freshmen	$80.00*, †	$7.00
Sophomores	50.00†-72.00†	11.00-20.00
Juniors	22.00-43.00	10.00-23.00
Seniors	20.00-39.00	10.00-28.00

* Includes $18.50 for drawing equipment which is used in all drawing courses.
† Includes a military deposit ($30.00) for the entire year. Net cost of the course depends upon amount of equipment and clothing lost, destroyed, worn out or held out by students, refund being made for that turned back in satisfactory condition to the Military department.

MAINE TECHNOLOGY EXPERIMENT STATION

General Statement

By action of the Board of Trustees, June, 1915, the establishment of a Maine Technology Experiment Station was authorized. This station is under the direct control of the Dean of the College of Technology and the heads of the departments.

Income

The income of the Station is derived from University appropriations and from the State Highway Department.

Object

The objects of the Station are to carry on practical research in engineering subjects, make investigations for State boards and municipal authorities, furnish scientific information to the industries of the State, and distribute accurate scientific knowledge to the people of the State.

Equipment

Most of the Station offices and laboratories are at present located in Wingate Hall, described in the section on University buildings. The Station is

well equipped for the testing of concrete and highway materials, both bituminous and non-bituminous. Crosby mechanical engineering laboratory is available for researches in the fields of hydraulics, steam-engineering, gas-engineering, metallography, and strength of materials. The electrical power laboratory in Lord Hall includes among its equipment a 150,000 volt testing transformer and standard instruments for calibration purposes. The communication laboratories in this building offer facilities for telephone transmission testing and radio research. The Department of Pulp and Paper Technology in Aubert Hall is equipped for the testing of pulp and paper products. The highway materials laboratory in the basement of Wingate Hall is equipped jointly by the Civil Engineering Department and the Maine State Highway Department.

Investigations

The principal line of research has been in the field of concrete and concrete materials. Some work has also been started in the pulp and paper industry. Researches are also being conducted in the electrical, mechanical, and chemical fields. In the field of concrete materials the Station is cooperating with the American Society for Testing Materials in the statistical analysis of data. Research in the field of soil mechanics has been undertaken at the Highway Materials Testing Laboratories.

Publications

The Station issues two series of publications: Bulletins and Papers. It has issued thirty-four Bulletins and twenty Papers. The papers have been issued as reprints from such technical journals and magazines as: Proc. Nat. Acad. of Sciences, Proc. Am. Soc. for Testing Materials, Proc. Am. Conc. Inst., Proc. Am. Soc. Civil Eng., Electrical Engineering, Journal Me. Assn. of Engrs., and Industrial and Engineering Chemistry.

CURRICULA

FRESHMAN YEAR

Common to all engineering courses and Chemistry

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ch 1a or 1 b Gen. Chem.	2	4	4	Ch 2a or 2b Gen. Chem.	2	4	4
Eh 1 Freshman Comp.	3	0	3	Eh 2 Freshman Comp.	3	0	3
Md 1 Funds. Draft.	0	4	2	Md 2 Ely. Mach. Draft.	0	4	2
Ms 1 Trigonometry	2	0	2	Ms 6 Anal. Geom.	4	0	4
Ms 3 Algebra	2	0	2	Mt 2 Military	2	1	1½
Mt 1 Military	2	1	1½	Ps 2b General Physics	4	2	5
Ps 1b General Physics	4	2	5	Pt 2 Phy. Education	0	2	0
Pt 1 Phy. Education	0	2	0	Gc 6 Orientation	1	0	½
Gc 5 Orientation	1	0	½				

Chemical Engineering Curriculum

This curriculum is designed to train students to become chemical engineers and leads to the Bachelor of Science degree in Chemical Engineering. The first two years are almost identical with those under the Chemistry curriculum, but in the junior and senior years the students enrolled take fundamental courses in chemical engineering, supported by related work in other engineering fields.

Graduates will be prepared to enter the profession of chemical engineering and to occupy positions as production foremen, plant directors, research and chemical engineers in industrial plants. Chemical engineering graduates from this Department are now holding responsible positions as consulting chemical engineers, industrial sales engineer, assistant plant superintendent, research chemical engineer, research engineer and plant director. Graduates from recent classes hold such positions as examiner in U. S. Patent Office, engineer, assistant traffic manager in a chemical company and several positions designated as chemist. Superior students should give serious consideration to an additional year's study for the Master of Science degree in Chemical Engineering.

A course in Chemical Engineering Practice is open to a selected group of Chemical Engineering undergraduate and graduate students. Students desir-

ing to take this course should apply at the time of registration of the first semester of their senior year. By this arrangement a selected group of seniors and graduate students may participate in investigations in actual plant operation, thus obtaining valuable and unusual experience.

The student must register for all courses listed in the first group for each semester unless in exceptional circumstances he is permitted to substitute an approved elective for a course printed in italics. Courses in this group not italicized *must be passed* before he is eligible for graduation.

The student must select sufficient additional hours to bring his total to that required by the College, namely, 143 exclusive of Military. See also statements on pages 233 and 234.

FRESHMAN YEAR

Common to all engineering courses. See page 237.

SOPHOMORE YEAR

Fall Semester

Subject	Hours Rec.	Lab. or Comp.	Cr.
Ch 21 Intro. Theoret. Chem.	*2*	*0*	*2*
Ch 31 Micro-Qual. Anal.	2	8	5
Eh 9 Modern Literature	*2*	*0*	*2*
Gm 19 German for Chemists	*3*	*0*	*3*
Ms 7 Diff. Calculus	5	0	5
Mt 3 Military	2	1	2
Pb 1 Pub. Speaking	2	0	2
Pt 3 Phy. Education	0	2	0

Spring Semester

Subject	Hours Rec.	Lab. or Comp.	Cr.
Ch 22 Intro. Theoret. Chem.	*2*	*0*	*2*
Ch 40 Quant. Anal.	1	8	4
Ee 30 Dir. Current Mach.	2	0	2
Gm 20 German for Chemists	*3*	*0*	*3*
Ms 8 Int. Calculus	5	0	5
Mt 4 Military	2	1	2
Ps 24 Elec. Meas.	*0*	*4*	*2*
Pt 4 Phy. Education	0	2	0

JUNIOR YEAR

Fall Semester

Subject		Hours	Lab. Rec. or Comp.	Cr.
Ch 51	Organic Chem.	3	4	5
Ch 71	Phys. Chem.	3	4	5
Ee 31	Alt. Curr.	2	0	2
Ee 33	Elec. Lab.	0	3	1½
Mn 53	Mechanics	3	0	3
	Electives			

Spring Semester

Subject		Hours	Lab. Rec. or Comp.	Cr.
Ch 52	Organic Chem.	3	4	5
Ch 72	Phys. Chem.	3	4	5
Ch 76	Els. of Chem. Eng.	3	0	3
Eh 6	Technical Comp.	2	0	2
Mn 54	Mechanics	3	0	3
	Electives			

SENIOR YEAR

Subject		Hours	Lab. Rec. or Comp.	Cr.
Ch 49	*Thesis*	*Arr.*		*1-3*
Ch 77	Els. of Chem. Eng.	3	0	3
Ch 81	Chem. Eng. Lab.	1	4	3
Ch 85	Seminar	1	0	1
Ch 93	*Econ. of Chem. and Ch. Eng.*	*2*	*0*	*2*
Me 43	Heat Engineering	3	0	3
	Electives	—	—	—

Subject		Hours	Lab. Rec. or Comp.	Cr.
Ch 50	*Thesis*	*Arr.*		*1-3*
Ch 62	Tech. Anal.	1	8	4
Ch 78	Els. of Ch. Eng.	3	0	3
Ch 80	Ind. Chem. and Stoichiometry	3	0	3
Ch 82	Chem. Eng. Lab.	1	4	3
Ch 86	Seminar	1	0	1
Ch 88	*Chem. Eng. Practice*	*Arr.*		*1-3*
Ch 94	*Econ. of Chem. and Ch. Eng.*	*2*	*0*	*2*
Me 40	Mechanical Lab.	0	3	1½
	Electives	—	—	—

Administrative Option for Chemical Engineers

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Fall Semester

Subject	Hours Rec.	Lab. or Comp.	Cr.
Ch 31 Micro-Qual. Anal.	2	8	5
Es 1a Prin. of Economics	3	0	3
Es 9 Accounting	2	2	3
Ms 7 Diff. Calculus	5	0	5
Mt 3 Military	2	1	2
Pb 1 Pub. Speaking	2	0	2
Pt 3 Phy. Education	0	2	0

Spring Semester

Subject	Hours Rec.	Lab. or Comp.	Cr.
Ch 40 Quant. Anal.	1	8	4
Ee 30 D. C. Machinery	2	0	2
Eh 10 Modern Lit.	2	0	2
Es 2a Prin. of Economics	3	0	3
Es 10 Accounting	2	2	3
Ms 8 Int. Calculus	5	0	5
Mt 4 Military	2	1	2
Pt 4 Phy. Education	0	2	0

JUNIOR YEAR

Subject	Hours Rec.	Lab. or Comp.	Cr.
Ch 51 Organic Chem.	3	4	5
Ch 71 Phys. Chem.	3	4	5
Eh 5 Technical Comp.	2	0	2
Es 51 Corp. Finance	*3*	*0*	*3*
Mn 53 Mechanics	3	0	3

Subject	Hours Rec.	Lab. or Comp.	Cr.
Ch 52 Organic Chem.	3	4	5
Ch 72 Phys. Chem.	3	4	5
Ch 76 Els. of Chem. Eng.	3	0	3
Ee 36 Alternating Curr.	2	0	2
Mn 54 Mechanics	3	0	3

SENIOR YEAR

Fall Semester

Subject		Hours Rec. or Comp.	Lab.	Cr.
Ch 49	Thesis	Arr.		1-3
Ch 77	Els. of Chem. Eng.	3	0	3
Ch 81	Chem. Eng. Lab.	1	4	3
Ch 85	Seminar	1	0	1
Ch 93	Econ. of Chem. and Ch. Eng.	2	0	2
Es 53	*Money & Banking*	*3*	*0*	*3*
Me 43	Heat Engineering	3	0	3

Spring Semester

Subject		Hours Rec. or Comp.	Lab.	Cr.
Ch 50	Thesis	Arr.		1-3
Ch 78	Els. of Ch. Eng.	3	0	3
Ch 80	Ind. Chem. and Stoichiometry	3	0	3
Ch 82	Chem. Eng. Lab.	1	4	3
Ch 86	Seminar	1	0	1
Ch 94	Econ. of Chem. and Ch. Eng.	2	0	2
Es 54	*Investments & Investment Banking*	*3*	*0*	*3*

Credit will not be given for election of courses covering substantially the same ground as another elected or required course that has been passed, i.e., Ce 35 and Ce 26.

Students desiring to elect any course may do so only with approval of the major instructor. Such free electives will be limited in number.

Since every university granting the Ph.D. degree requires a reading knowledge of both French and German, it is advisable for the student who may continue with graduate work to be prepared in this respect.

Chemistry Curriculum

The primary aim of the Chemistry curriculum is to present the principles and techniques of inorganic, analytical, organic, and physical chemistry. Chemistry graduates will be prepared to undertake the great variety of problems which are the normal duties of a chemist.

The second aim is to develop a research attitude in the student as a preparation for graduate study and ultimately for research, industrial, and teaching positions in the chemical profession. Superior students should give serious consideration to the additional advantages offered by graduate study in chemistry.

Chemists who have graduated from this Department are now holding responsible positions as paint chemist, rubber chemist, consulting chemist, research chemist, university and secondary-school teachers of chemistry, de-

	Elective Band 2					Elective Band 2		
Es 21	Labor Problems	3	0	3	Es 52	Social Con. of Ind.	3	0	3
Es 51	Corp. Finance	3	0	3	Ms 18	Invest. Theory	2	0	2
Ms 17	Invest. Theory	2	0	2	Py 2	Gen. Psychology	2	2	3
Py 1	Gen. Psychology	2	2	3	Py 12	Advertising	3	0	3
	Elective Band 3					Elective Band 3		
Py 1	Gen. Psychology	2	2	3	Py 2	Gen. Psychology	2	2	3
					Py 12	Advertising	3	0	3
	Elective Band 4					Elective Band 4		
	French					French		
						Elective Band 5		
					Eh 78	Creative Writing	3	0	3

SENIOR YEAR

Fall Semester

Subject		Hours Rec.	Lab. or Comp.	Cr.
Ch 49	*Thesis*	*Arr.*		*1-3*
Ch 61	Adv. Quant. Anal.	1	8	4
Ch 85	Seminar	1	0	1
Ch 91	*Adv. Org. Chem.*	*3*	*0*	*3*
Ch 93	*Econ. of Chem. and Ch. Eng.*	*2*	*0*	*2*
	Electives	—	—	3-5

Spring Semester

Subject		Hours Rec.	Lab. or Comp.	Cr.
Ch 50	*Thesis*	*Arr.*		*1-3*
Ch 56	*Structure of Matter**	*2*	*0*	*2*
Ch 84	*Metallurgy*	*3*	*0*	*3*
Ch 86	Seminar	1	0	1
Ch 92	*Adv. Org. Chem.*	*3*	*0*	*3*
Ch 94	*Econ. of Chem. and Ch. Eng.*	*2*	*0*	*2*
	Electives	—	—	6-8

* *Alternates with Ch 54*

Suggested Elective Courses				
Elective Band 1				
Bc 51	Biochemistry	3	0	3
Bc 57	Biological Colloids	3	0	3
Ce 17	Econ. Geol.	2	0	2
Ch 55	Contemporary Chem.	1	0	1
Ch 73	Chem. Microscopy	0	6	2
Ch 89	Organ. Prepns.	0	4	2
Ch 95	Thermodynamics	3	0	3
Ms 53	Adv. Calculus	3	0	3
Pa 87	Paper Test. & Anal.	0	4	2
Pl 5	Personal Philosophy	3	0	3
Elective Band 2				
Ce 17	Econ. Geology	2	0	2
Es 53	Money & Banking	3	0	3
Ms 19	Statistics	2	0	2
Py 81	Mental Measurement	1	4	3
Elective Band 3				
Hy 21	Cur. World Prob.	2	0	2
Py 81	Mental Measurement	1	4	3
Elective Band 4*				
	French			
Elective Band 5				
Eh 9	Modern Lit.	2	0	2

Suggested Elective Courses				
Elective Band 1				
Bc 2	Biochemistry	3	4	5
Ch 74	Chem. Microscopy	0	6	2
Ch 82	Chem. Eng. Lab.	1	4	3
Ch 90	Organ. Analysis	0	4	2
Ch 96	Electrochemistry	3	0	3
Ms 54	Adv. Calculus	3	0	3
Pl 6	Personal Philosophy	3	0	3
Pl 8	Technique of Thinking	2	0	2
Elective Band 2				
Es 16	Business Law	3	0	3
Es 54	Invest. & Invest. Bank.	3	0	3
Me 98	Management	2	0	2
Ms 20	Statistics	2	0	2
Py 82	Mental Measurement	1	4	3
Elective Band 3				
Hy 22	Cur. World Prob.	2	0	2
Py 82	Mental Measurement	1	4	3
Elective Band 4*				
	French			

Credit will not be given for election of courses covering substantially the same ground as another elected or required course that has been passed.

Students desiring to elect any course not on a suggested list may do so only with approval of major instructor. Such free electives will be limited in number.

*Since every university granting the Ph.D. degree requires a reading knowledge of both French and German, it is advisable for the student who may continue with graduate work to be prepared in this respect.

Civil Engineering Curriculum

The object of the curriculum in Civil Engineering is to give the student a thorough knowledge of the principles underlying the profession.

The methods of instruction are recitations, lectures, original problems, work in the testing laboratories, field practice, and designing. Effort is made to acquaint the student with the best engineering practice and with the standard engineering literature. During each year it is the practice to have several lectures by engineers from other institutions and by those engaged only in practical work. These lectures tend to increase the interest of the student and to bring him in touch with men from outside his own institution.

The endeavor is made to impress upon the mind of the student that he must obtain experience and judgment, without which he can never become a successful engineer. Besides giving the student a technical training, an opportunity is offered for every student to form the basis of a liberal education.

The work of the first year is the same for all engineering students. The technical work begins in the fall semester of the second year with field work and the study of surveying. This technical work is gradually increased until the senior year, when it is nearly all professional. At the beginning of the senior year an opportunity is offered to elect one of three options. The first, called Option 1, consists of work in hydraulic engineering; the second, Option 2, consists of work in highway engineering; while Option 3 is specialized along the lines of sanitary engineering.

Through the courtesy of the Bangor Hydro-Electric Company, their plant at Stillwater has been made available to the University for experimentation and research. Those students electing Option 1 will determine the efficiency and cost of operation of the plant. A study will be made of its hydraulic design and structural features with a view to recommending improvements.

The facilities of the Maine State Highway Testing Laboratory are available for experimentation and research by students in the Civil Engineering Department. All students electing Option 2 make a complete design and cost estimate of a section of highway surveyed during Summer Camp.

Those students electing Option 3 cooperate with the State Public Health Department in making a sanitary survey of a nearby watershed which is a present or prospective source of public water supply. They also make a survey of the sanitary conditions in a nearby town.

Each student is urged to select a thesis, the treatment of which helps to develop initiative and original thought, besides treating in a comprehensive manner some subject in which he is most interested.

All sophomore and junior Civil Engineering students are required to attend Summer Camp from June 20 to July 30, 1938. After 1938, Summer Camp will be required of sophomores only.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Fall Semester

Subject			Hours		
			Rec. or Comp.	Lab.	Cr.
Ce	1	Plane Surveying	3	0	3
Ce	3	Field Work & Plotting	0	9	3
Md	3	Des. Geometry	0	6	2
Ms	7	Diff. Calculus	5	0	5
Mt	3	Military	2	1	2
Pb	1	Pub. Speaking	2	0	2
Pt	3	Phy. Education	0	2	0
		Elective	—	—	—

Spring Semester

Subject			Hours		
			Rec. or Comp.	Lab.	Cr.
Ce	10	Curves and Earthwork	3	0	3
Ce	16	Geology	2	0	2
Ms	8	Int. Calculus	5	0	5
Mt	4	Military	2	1	2
Pb	6	Persuasive Speech	2	0	2
Ps	22	Mechanics & Heat Lab.	0	4	2
Pt	4	Phy. Education	0	2	0
		Elective	—	—	—

SUMMER CAMP

Subject			Hours. Cr.
Ce	11s	Highway & Railroad Surveys	3
Ce	24s	Geodetic & Topographic Surveying	2
Ce	51s	Hydrographic Surveying	1

JUNIOR YEAR

Fall Semester					*Spring Semester*				
Subject		Hours			Subject		Hours		
		Rec.	Lab. or Comp.	Cr.			Rec.	Lab. or Comp.	Cr.
As 11	Pract. Astron.	2	1½	2½	Ce 20	Structural & Highway Materials	1	4	3
Ce 23	Adv. Surveying	1	0	1	Ce 26	Hydraulics	3	0	3
Ce 25	Eng. Geology	2	3	3	Ce 52	Theory & Des. of Steel Structures	5	0	5
Ce 29	Highway Const.	2	0	2	Mn 52	Mechanics	5	0	5
Ce 33	San. Eng. & Water Supply	2	3	3		Elective	—	—	—
Mn 51	Mechanics	5	0	5					
	Elective	—	—	—					

SENIOR YEAR

Subject		Hours			Subject		Hours		
		Rec.	Lab. or Comp.	Cr.			Rec.	Lab. or Comp.	Cr.
Ce 57	Conc. Structures & Foundations	5	0	5	Ce 60	Drafting	0	6	2
Ce 59	Drafting	0	9	3	Ee 36	Alt. Currents	2	0	2
Ee 35	D. C. Machy.	2	0	2	Ee 38	Elec. Lab.	0	3	1½
Me 39	Mech. Lab.	0	3	1½	Eh 6	Tech. Comp.	2	0	2
					Es 16	Business Law	3	0	3
	Highway Option					Highway Option			
Ce 53	Hyd. Eng.	0	2	1	Ce 68	Highway Design	0	4	2
Ce 63	Highway Econ.	3	0	3	Ce 72	Highway Eng.	2	0	2
	Hydraulic Option					Hydraulic Option			
Ce 51	Hyd. Eng.	0	4	2	Ce 56	Hyd. Eng.	0	4	2
Ce 55	Hydrology	2	0	2	Me 78	Hyd. Lab.	0	3	1½
	Sanitary Option					Sanitary Option			
By 3	Bacteriology	2	0	2	By 2	Bacteriology	0	6	3
Ce 71	Water Supply	2	0	2	Ce 74	Sanitary Eng.	2	0	2

Electrical Engineering Curriculum

This curriculum is intended to provide the student with a thorough understanding of the underlying principles of electrical engineering and to develop an ability to solve problems of an engineering nature from commercial as well as technical premises. To accomplish this, the student first studies

the various electrical laws and methods of electrical measurements and correlates them with various laws previously assimilated in the study of physics and mathematics. These studies are followed by more advanced courses involving the fundamental electrical laws and theories and showing their application to the design, operation, and performance of electrical apparatus such as is used in the generation of electrical energy or in transforming electrical energy into mechanical energy for the various commercial requirements.

Courses in communication engineering are offered. These aim to provide the student with a thorough understanding of the basic principles of electrical communication, and to familiarize him with the design and operating characteristics of communication systems and component apparatus. Electrical reproduction of sound for motion pictures is also treated, with some emphasis on architectural acoustics, speech, and hearing. Basic work in television and the industrial applications of vacuum tubes are made a part of the laboratory work of the Department.

It is the endeavor of the Department to acquaint the student with contemporary engineering practice, and, by persistent association of abstract analysis with practical problems, to equip him with the fundamentals of a successful career. Stress is laid upon the systematic reading of technical periodicals and the acquirement of a reference library. Effort is made to have lectures by active engineers and alumni following their profession, thus bringing the student into more intimate contact with the engineering world.

In addition to the purely electrical subjects, the student takes the customary work in mathematics, physics, mechanics, shop, drawing, and allied engineering courses, together with the humanistic studies enumerated below.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Fall Semester

Subject			Hours		
			Rec.	Lab. or Comp.	Cr.
Ee	1	Els. Elec. Eng.	2	5	4
Es	1b	Prin. of Econ.	2	0	2
Md	3	Des. Geometry	0	6	2
Ms	7	Diff. Calculus	5	0	5
Mt	3	Military	2	1	2
Pb	1	Pub. Speaking	2	0	2
Py	1	General Psychology	2	2	3
Pt	3	Phy. Education	0	2	0

Spring Semester

Subject			Hours		
			Rec.	Lab. or Comp.	Cr.
Ee	2	Els. Elec. Eng.	2	5	4
Ce	2	Plane Surveying	1⅔	⅓	2
Es	2b	Prin. of Econ.	2	0	2
Ms	8	Int. Calculus	5	0	5
Mt	4	Military	2	1	2
Pb	6	Persuasive Speech	2	0	2
Py	2	General Psychology	2	2	3
Pt	4	Phy. Education	0	2	0

JUNIOR YEAR

Subject			Hours		
			Rec.	Lab. or Comp.	Cr.
Ee	13	Electronics	2	3	3
Ee	15	El. Cir. & Mach.	3	0	3
Ee	17	Elec. Lab.	1	3	2½
Eh	5	Tech. Comp.	2	0	2
Me	27	Kinematics	3	0	3
Mn	53	Mechanics	3	0	3
		Options (One subject required)			
Es	53	Money & Banking	3	0	3
Me	9	Machine Work	0	4	1½
Ms	53	Adv. Calculus	3	0	3
Ms	55	Diff. Equations	3	0	3

Subject			Hours		
			Rec.	Lab. or Comp.	Cr.
Ee	16	El. Cir. & Mach.	3	3	4
Ee	18	Elec. Lab.	1	3	2½
Ee	22	Tel. Com.	3	0	3
Ee	24	Tel. Lab.	0	3	1½
Me	44	Heat Eng.	3	0	3
Mn	54	Mechanics	3	0	3
		Options (One subject required)			
Es	54	Invest. & Invest. Bank.	3	0	3
Es	72	Labor Problems	3	0	3
Me	10	Machine Work	0	4	1½
Ms	54	Adv. Calculus	3	0	3

SENIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec. or Comp.	Lab.	Cr.		Rec. or Comp.	Lab.	Cr.
Ee 51 Alt. Cur. Appar.	3	4	5	Options (Six subjects required)			
Ee 75 Elec. Lab.	1	3	2½				
Me 45 Heat Eng.	3	0	3				
Options (Two subjects required)				Ee 50 Thesis	Arr.		1-3
				Ee 56 Elec. Power Plants	3	0	3
Ee 49 Thesis	Arr.		1-3	Ee 58 Elec. Power Transm.	2	3	3
Ee 61 Illum. Eng.	3	0	3	Ee 60 Adv. Elec. Mach.	3	0	3
Ee 63 Elec. Transp.	3	0	3	Ee 76 Elec. Lab.	1	3	2½
Ee 81 Comm. Eng.	0	6	2	Ee 84 Tel. Transm.	0	6	2
Ee 83 Comm. Lab.	0	3	1½	Ee 86 Radio Eng.	2	2	3
Ee 85 Radio Eng.	1	2	2	Ee 88 Radio Lab.	0	3	1½
Ee 87 Eng. Acoustics	2	0	2	Ee 92 Theory of Elect.	2	0	2
Ee 91 Theory of Elect.	2	0	2	Es 16 Business Law	3	0	3
Es 51 Corp. Finance	3	0	3	Me 98 Management	2	0	2
Me 41 Mech. Lab.	0	3	1½				

Engineering Physics

The aim of this curriculum is to provide a fundamental background in science for those students who expect to enter the field of industrial physics and also for those who wish to prepare themselves for careers in research. There has been a growing demand on the part of industry for men trained primarily in physics in an engineering atmosphere. It is recognized that undergraduate specialization in one or more of the well-defined engineering fields is not a rigid requirement for success in industrial work. Certain students not only have an aptitude for but profit by an undergraduate curriculum primarily developed around basic courses in physics, chemistry, and mathematics beyond those required by engineering curricula generally. Physical engineering is the name often used to characterize this field, which is comparable to the field of chemical engineering as distinguished from chemistry.

The work of the first year being the same for all engineering students, it is not until the fall of the second year that the added emphasis upon physics is realized. After this a sufficient amount of chemistry and mathematics is included in the curriculum along with courses in advanced physics to develop

a sound scientific background. Also an opportunity is provided through required or elective courses to gain an insight into each of the fields of engineering so that the student develops in an engineering atmosphere; there is more emphasis, however, on science than on engineering.

This course also prepares a student for graduate work in physics, if he is interested in further developing himself along research lines.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Fall Semester

Subject	Hours Rec. or Comp.	Hours Lab.	Cr.
Ch 51a Organic Chem.	3	0	3
*Es 1b Prin. of Economics	2	0	2
*Gm 19 German for Chemists	3	0	3
Ms 7 Diff. Calculus	5	0	5
Mt 3 Military	2	1	2
Pb 1 Public Speaking	2	0	2
Ps 17 Intermed. Physics	3	0	3
Ps 19 Int. Lab. Phys.	0	2	1
Pt 3 Phys. Education	0	2	0
Electives			
Ch 21 Introd. Theor. Chem.	2	0	2
Md 3 Des. Geometry	0	6	2
Me 9 Machine Work	0	4	1½

Spring Semester

Subject	Hours Rec. or Comp.	Hours Lab.	Cr.
Ch 40a Quant. Analysis	1	6	3
*Es 2b Prin. of Economics	2	0	2
*Gm 20 German for Chemists	3	0	3
Ms 8 Integ. Calculus	5	0	5
Mt 4 Military	2	1	2
Ps 18 Intermed. Physics	3	0	3
Ps 20 Int. Lab. Physics	0	2	1
Pt 4 Phys. Education	0	2	0
Electives			
Ch 22 Introd. Theor. Chem.	2	0	2
Me 10 Machine Work	0	4	1½
Ps 10 Meteorology	3	0	3

JUNIOR YEAR

Fall Semester

Subject	Hours Rec. or Comp.	Lab.	Cr.
*Ch 71 Physical Chem.	3	4	5
Ee 35 D. C. Machinery	2	0	2
Eh 5 Technical Comp.	2	0	2
*Gm 21 German for Chemists	3	0	3
Mn 53 Mechanics	3	0	3
Ms 55 Diff. Equations	3	0	3
Ps 55 Elec. and Mag.	3	0	3
Electives			
Ce 1 Plane Surveying	3	0	3
Ee 1p Els. Elec. Eng.	2	3	3
Pa 65 Pulp Technology	2	0	2
Py 1 Gen. Psychology	2	2	3
Zo 3 Animal Biology	2	4	4

Spring Semester

Subject	Hours Rec. or Comp.	Lab.	Cr.
*Ch 72a Physical Chem.	3	0	3
Ee 36 Alt. Currents	2	0	2
Eh 10 Modern Lit.	2	0	2
*Gm 22 German for Chemists	3	0	3
Mn 54 Mechanics	3	0	3
Ps 56 Elec. and Mag.	3	0	3
Ps 58 Math. Physics	3	0	3
Electives			
Ce 16 Geology	2	0	2
Ch 76 Els. Chem. Eng.	3	0	3
Ee 2p Els. Elec. Eng.	2	3	3
Pa 66 Paper Technology	2	0	2
Py 2 Gen. Psychology	2	2	3
Zo 4 Animal Biology	2	4	4

* Substitutions may be made for courses marked * providing they are approved by the department head, with the exception that at least one year of German must be taken before graduation.

SENIOR YEAR

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ms 53 Advanced Calculus	3	0	3
Ps 61 Heat, or			
Ps 73 Light, or			
Ps 59 Sound	3	0	3
Ps 81 Advanced Lab. (Thesis)	Arr.		1-3
Electives			9

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ms 54 Adv. Calculus	3	0	3
Ps 66 Vacuum Tubes and Thermionic Phen. or			
Ps 68 Mod. Phys. Theories	3	0	3
Ps 82 Adv. Lab. (Thesis)	Arr.		1-3
Electives			9

Electives (In addition to the preceding)			
Ch 77 Els. of Chem. Eng.	3	0	3
Ch 81 Chem. Eng. Lab.	1	4	3
Ch 95 Thermodynamics	3	0	3
Me 21 El. of Mech. Eng.	2	0	2
Me 79 Heat Engineering	3	0	3

Electives (In addition to the preceding)			
Ce 26 Hydraulics	3	0	3
Ch 80 Ind. Chem. & Stoichiometry	3	0	3
Ch 82 Chem. Eng. Lab.	1	4	3
Me 32 Materials of Eng.	2	0	2
Me 80 Heat Engineering	3	0	3
Ps 32 Photography	2	2	3

General Engineering Curriculum

This curriculum is designed primarily to permit a selected few, preeminently capable students the opportunity of pursuing a curriculum which gives a broad emphasis on the fundamentals of engineering and to develop themselves along lines of particular aptitudes or choice. The first objective is met by including such studies as organic chemistry, qualitative and quantitative analysis, metallurgy, geology, thermodynamics, the laws of the electric circuit, and the theory of structures. In addition to these studies in technical culture, a sequence of studies in any one of several groups in scientific culture, or liberal culture, is afforded.

These elective groups are: (1) mathematics and science, (2) economics and psychology, (3) history, psychology, and sociology, (4) foreign language, (5) literature.

Those students showing marked inventive or research abilities are guided to studies in mathematics and science; those with tendencies for commercial or managerial work are advised to elect the second or third group; and for the students with strong preference for language or literature, the fourth and fifth groups are provided.

Orientation lectures, which engineering freshmen are required to attend, and conferences with faculty advisers during his first year are designed to assist the freshman in the final selection of his course.

This course is also particularly adapted to the needs of the student who prefers to specialize in a graduate rather than in an undergraduate course and can utilize the latter as preparation for the former. In such a case a student at the beginning of the sophomore year would definitely select certain fundamental studies in one of the four departments: Chemical Engineering, Civil Engineering, Electrical Engineering, or Mechanical Engineering, and pursue, during the course, a sequence of studies in that department.

Arrangements have been completed with the Department of Economics so that a student starting with certain electives in that department in the

sophomore year, would be able to obtain a degree of Master of Science in Economics by an additional fifth year of study, after obtaining the B.S. in General Engineering at the end of four years.

The Dean of the College is the adviser and registering officer for students in this course.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours	Lab. Rec. or Comp.	Cr.	Subject	Hours	Lab. Rec. or Comp.	Cr.
Ch 31 Micro-Qual. Anal.	2	8	5	Ce 16 Geology	2	0	2
Es 1a Prin. of Econ.	3	0	3	Ch 40 Quant. Anal.	1	8	4
Ms 7 Diff. Calculus	5	0	5	Es 2a Prin. of Econ.	3	0	3
Mt 3 Military	2	1	2	Ms 8 Int. Calculus	5	0	5
Pb 1 Public Speaking	2	0	2	Mt 4 Military	2	1	2
Electives				Electives			
Ce 1 Plane Surveying	3	0	3	Ce 2 Plane Surveying	1⅔	1⅓	2
or				or			
Ee 1 Els. Elec. Eng.	2	5	4	Ee 2 Els. Elec. Eng.	2	5	4

JUNIOR YEAR

Subject	Hours	Lab. Rec. or Comp.	Cr.	Subject	Hours	Lab. Rec. or Comp.	Cr.
Ch 71 Phys. Chem.	3	4	5	Ch 72 Phys. Chem.	3	4	5
Eh 5 Tech. Comp.	2	0	2	Eh 10 Mod. Lit.	2	0	2
Es 9 Accounting	2	2	3	Es 10 Accounting	2	2	3
Mn 53 Mechanics	3	0	3	Mn 54 Mechanics	3	0	3
Electives				Electives			
Ee 13 Electronics	2	3	3	Ce 26 Hydraulics	3	0	3
Me 27 Kinematics	3	0	3	Ch 76 Els. Chem. Eng.	3	0	3
				Ch 84 Metallurgy	3	0	3

SENIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours Rec. or Comp.	Lab.	Cr.	Subject	Hours Rec. or Comp.	Lab.	Cr.
Es 51 Corp. Finance	3	0	3	Ce 52 Theory & Des. of Structures	5	0	5
Me 69 Mech. Lab.	0	3	1½	Es 72 Labor Prob.	3	0	3
Me 79 Heat Eng.	3	0	3	Me 70 Mech. Lab.	0	3	1½
Electives				Me 80 Heat Eng.	3	0	3
Ch 77 Els. Chem. Eng.	3	0	3	Electives			
Ee 15 El. Cir. & Mach.	3	0	3	Ee 16 El. Cir. & Mach.	3	3	4
Ee 17 Elec. Lab.	1	3	2½	Ee 18 Elec. Lab.	1	3	2½

Mechanical Engineering Curriculum

The field of the mechanical engineer embraces all work involving the design, construction, or installation of machinery, either for manufacturing, transportation, or power generation; the design, manufacture, and installation of heating and ventilating or refrigerating equipment; the superintendence or management of factories, power plants, and motive power; the equipment of railways, and similar work.

The Mechanical Engineering curriculum is arranged to equip men as well as possible in four years' time to enter any of these lines of work.

It is not possible to develop the student into an expert engineer in any branch of the profession. It is also not possible, in general, to foresee what will be his ultimate occupation. Accordingly, those subjects which are fundamental to all engineering work and which may best be learned in college are most emphasized in the required courses, while those subjects which are best acquired in practical work are left for the engineer graduate to obtain in actual practice. An endeavor is made, however, to give the more advanced technical courses such a trend as to make the period of adjustment of the graduate to practical engineering conditions short, and his acquirement of the knowledge necessary for advancement rapid.

The theoretical work is taught by lectures and recitations. The texts are carefully chosen and are supplemented, where necessary to illustrate more recent practice, by explanation and examples given by the instructor. Numerous problems are assigned for work outside the classroom to make sure the student can apply the principles learned.

Courses in the shops and laboratories illustrate the application of matter learned in the recitation work, and also teach methods of construction, operation, and testing of apparatus by direct contact with it. In the drawing rooms, applications of theories to work in design are taught, together with methods and requirements for the production of neat and accurate engineering drawings.

Thorough instruction is given in the theory and operation of both direct and alternating current electrical machinery, with ample practice in the electrical laboratory. Lectures by practical engineers and trips of inspection to engineering works help to bring before the student the conditions existing in practice.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Fall Semester

Subject			Hours Rec. or Comp.	Hours Lab.	Cr.
Es	1b	Prin. of Econ.	2	0	2
Md	3	Des. Geometry	0	6	2
Me	1	Foundry & Forging	0	6	2
Me	21	Els. Mech. Eng.	2	0	2
Ms	7	Diff. Calculus	5	0	5
Mt	3	Military	2	1	2
Pb	1	Public Speaking	2	0	2
Ps	21	Mech. & Heat Lab.	0	4	2
Pt	3	Phy. Education	0	2	0

Spring Semester

Subject			Hours Rec. or Comp.	Hours Lab.	Cr.
Es	2b	Prin. of Econ.	2	0	2
Md	4	Adv. Mach. Drafting	0	6	2
Me	2	Pattern Work	0	6	2
Me	38	Mech. Lab.	0	3	1½
Me	32	Materials of Eng.	2	0	2
Ms	8	Int. Calculus	5	0	5
Mt	4	Military	2	1	2
Pb	4	Debate or option	2	0	2
Pt	4	Phy. Education	0	2	0

JUNIOR YEAR

Fall Semester

Subject			Hours Rec. or Comp.	Lab.	Cr.
Es	21	Labor Problems or Option	3	0	3
Me	7	Machine Work	0	6	2
Me	55	Kinematics	3	3	4
Me	69	Mech. Lab.	0	3	1½
Me	79	Heat Eng.	3	0	3
Mn	51	Mechanics	5	0	5

Spring Semester

Subject			Hours Rec. or Comp.	Lab.	Cr.
Eh	6	Tech. Comp.	2	0	2
Me	8	Machine Work	0	6	2
Me	46	Heat Power or Option	3	0	3
Me	66	Machine Design	2	3	3
Me	70	Mech. Lab.	0	3	1½
Me	80	Heat Eng.	3	0	3
Mn	52	Mechanics	5	0	5

SENIOR YEAR

Subject			Hours Rec. or Comp.	Lab.	Cr.
Ce	35	Hydraulics	2	0	2
Ee	35	D. C. Machy.	2	0	2
Me	71	Mech. Lab.	0	3	1½
Me	81	Heat Eng.	2	3	3
Me	87	Machine Design	0	6	2
Me	91	Heat & Vent.	2	0	2
Me	93	Gas Engines	3	0	3
Py	3	App. Psychol. (or Option)	3	0	3

Subject			Hours Rec. or Comp.	Lab.	Cr.
Ee	36	Alt. Currents	2	0	2
Ee	38	Elec. Lab.	0	3	1½
Me	50	Thesis (or Option)	Arr		3
Me	72	Mech. Lab.	0	3	1½
Me	86	Power Plants	3	0	3
Me	88	Dynamics of Machines (or Option)	2	3	3
Me	98	Management	2	0	2

Administrative Engineering Option for Mechanical Engineers

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Fall Semester

Subject			Hours Rec. or Comp.	Hours Lab.	Cr.
Es	1a	Prin. of Econ.	3	0	3
Es	9	Accounting	2	2	3
Md	3	Des. Geometry	0	6	2
Me	1	Foundry & Forging	0	6	2
Ms	7	Diff. Calculus	5	0	5
Mt	3	Military	2	1	2
Pb	1	Public Speaking	2	0	2
Pt	3	Phy. Education	0	2	0

Spring Semester

Subject			Hours Rec. or Comp.	Hours Lab.	Cr.
Es	2a	Prin. of Econ.	3	0	3
Es	10	Accounting	2	2	3
Md	4	Adv. Mach. Drafting	0	6	2
Me	2	Pattern Work	0	6	2
Me	32	Materials of Eng.	2	0	2
Ms	8	Int. Calculus	5	0	5
Mt	4	Military	2	1	2
Pt	4	Phy. Education	0	2	0

JUNIOR YEAR

Subject			Hours Rec. or Comp.	Hours Lab.	Cr.
Ee	35	D. C. Machy.	2	0	2
Es	53	Money & Banking	3	0	3
Me	7	Machine Work	0	6	2
Me	55	Kinematics	3	3	4
Me	69	Mech. Lab.	0	3	1½
Me	79	Heat Eng.	3	0	3
Mn	53	Mechanics	3	0	3

Subject			Hours Rec. or Comp.	Hours Lab.	Cr.
Ee	36	Alt. Currents	2	0	2
Ee	38	Elec. Lab.	0	3	1½
Me	8	Machine Work	0	6	2
Me	66	Machine Design	2	3	3
Me	70	Mech. Lab.	0	3	1½
Me	80	Heat Eng.	3	0	3
Mn	54	Mechanics	3	0	3
Pb	4	Debate or option	2	0	2

SENIOR YEAR

Fall Semester

Subject	Hours Rec.	Lab. or Comp.	Cr.
Es 51 Corp. Finance	3	0	3
Es 55 Business Law	3	0	3
Me 71 Mech. Lab.	0	3	1½
Me 83 Industrial Management	4	0	4
Me 85 Indus. Relations	2	0	2
Me 87 Machine Design	0	6	2
Electives	—	—	3-4

Spring Semester

Subject	Hours Rec.	Lab. or Comp.	Cr.
Eh 6 Tech. Comp.	2	0	2
Es 54 Invest. & Invest. Bank.	3	0	3
Me 72 Mech. Lab.	0	3	1½
Me 84a Industrial Eng.	2	0	2
Me 84b Industrial Eng. Problems	0	4½	1½
Me 90 Eng. Cost Accounting	2	3	3
Electives	—	—	3-4

SUGGESTED ELECTIVES

Me 81 Heat Eng.	2	3	3
Me 91 Heat & Vent.	2	0	2
Me 93 Gas Engines	3	0	3
Me 50 Thesis	Arr.		3
Me 86 Power Plants	3	0	3
Me 88 Dynamics of Machines	2	3	3
Me 94 Hydraulic Machinery	3	0	3

Pulp and Paper Technology Curriculum

This curriculum is offered to furnish training in the fundamentals of mathematics, chemistry, engineering, and pulp and paper technology. The first two years are identical with those under the Chemical Engineering curriculum, but in the junior and senior years the students enrolled take, in part, fundamental courses in mechanics, mechanical, chemical, and electrical engineering, and pulp and paper technology. Pulp and Paper Technology graduates will be prepared to occupy positions as production foremen, salesmen, research chemists, and works-control chemists in pulp and paper plants and in allied industries.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 237.

SOPHOMORE YEAR

Same as Chemical Engineering.* See page 238.

JUNIOR YEAR

Fall Semester

Subject	Hours Rec. or Comp.	Lab.	Cr.
Bt 43 Wood Iden.	0	3	1
Ch 51 Organic Chem.	3	4	5
Ch 71 Phys. Chem.	3	4	5
Mn 53 Mechanics	3	0	3
Pa 65 Pulp Tech.	2	0	2
Pa 67 Pulp Mfg. (9 wks.)	0	8	2
Electives	—	—	0-4

Spring Semester

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ch 52 Organic Chem.	3	4	5
Ch 72 Phys. Chem.	3	4	5
Ch 76 Els. of Chem. Eng.	3	0	3
Mn 54 Mechanics	3	0	3
Pa 66 Paper Tech.	2	0	2
Pa 68 Paper Mfg. (9 wks.)	0	8	2
Electives	—	—	0-3

* With exception of Ee 30, which comes in senior year.

SUGGESTED ELECTIVE COURSES

Elective Band 1

By 1 Bacteriology and	0	6	3
By 3 Bacteriology	2	0	2
By 5 Bacteriology	0	2	1
Ce 13 Phys. Geology	3	0	3
Ch 61 Adv. Quant. Anal.	1	8	4
Ps 61 Heat	3	0	3

Elective Band 2

Es 21 Labor Problems	3	0	3
Es 51 Corp. Finance	3	0	3
Ms 17 Invest. Theory	2	0	2
Py 1 Gen. Psychology	2	2	3

Elective Band 3

Py 1 Gen. Psychology	2	2	3

SUGGESTED ELECTIVE COURSES

Elective Band 1

By 2 Bacteriology	0	6	3
Ce 14 Hist. Geology	3	0	3
Ch 62 Tech. Anal.	1	8	4
Me 66 Machine Design	2	3	3

Elective Band 2

Es 52 Social Con. of Ind.	3	0	3
Ms 18 Invest. Theory	2	0	2
Py 2 Gen. Psychology	2	2	3
Py 12 Advertising	3	0	3

Elective Band 3

Py 2 Gen. Psychology	2	2	3
Py 12 Advertising	3	0	3

	Elective Band 4			
	French or			
Gm 19	German for Chem.	3	0	3

	Elective Band 4			
	French or			
Gm 20	German for Chem.	3	0	3
	Elective Band 5			
Eh 78	Creative Writing	3	0	3
Ph 4	Debate	2	0	2

SENIOR YEAR

Fall Semester

Subject		Hours Rec. or Comp.	Lab.	Cr.
Ch 77	Els. of Chem. Eng.	3	0	3
Ch 81	*Chem. Eng. Lab.*	*1*	*4*	*3*
Ch 93	*Econ. of Chem. and Ch.E.*	*2*	*0*	*2*
Ee 35	D. C. Machinery	2	0	2
Eh 5	Technical Comp.	2	0	2
Me 43	Heat Engineering	3	0	3
Pa 85	Cellulose	0	4	2
Pa 87	Paper Testing	0	4	2
	Electives	—	—	0-4

Spring Semester

Subject		Hours Rec. or Comp.	Lab.	Cr.
Ch 78	Els. of Chem. Eng.	3	0	3
Ch 82	*Chem. Eng. Lab.*	*1*	*4*	*3*
Ch 94	*Econ. of Chem. and Ch.E.*	*2*	*0*	*2*
Ee 36	Alternating Curr.	2	0	2
Ee 38	Elec. Lab.	0	3	1½
Me 40	Mechanical Lab.	0	3	1½
Pa 82	Paper Color (9 wks.)	0	8	2
Pa 86	Pulp Bleach (9 wks.)	0	8	2
Pa 50	*Thesis*	*Arr.*		*1-3*
	Electives	—	—	0-7

SUGGESTED ELECTIVE COURSES

	Elective Band 1			
Ce 35	Hydraulics	2	0	2
Ch 73	Chem.-Microscopy	0	6	2
Ch 91	Adv. Org. Chem.	3	0	3
Ch 95	Thermodynamics	3	0	3
Mn 101	Adv. Mechanics	2	0	2
Ms 53	Adv. Calculus	3	0	3
Pa 49	Thesis	Arr.		1-3

SUGGESTED ELECTIVE COURSES

	Elective Band 1			
Ce 26	Hydraulics	3	0	3
Ch 74	Chem.-Microscopy	0	6	2
Ch 80	Indust. Chem. and Stoichiometry	3	0	3
Ch 92	Adv. Org. Chem.	3	0	3
Ch 96	Electrochemistry	3	0	3
Me 98	Management	2	0	2
Mn 102	Adv. Mechanics	2	0	2
Ms 54	Adv. Calculus	3	0	3

	Elective Band 2				Elective Band 2		
Ce	17	Econ. Geology....2	0	2	Ms 20	Statistics 2	0	2
Ms	19	Statistics 2	0	2	Py 82	Mental Measurement 1	4	3
Py	81	Mental Measurement 1	4	3				
		Elective Band 3				Elective Band 3		
Hy	21	Cur. World Prob. 2	0	2	Hy 22	Cur. World Prob. 2	0	2
Py	81	Mental Measurement 1	4	3	Py 82	Mental Measurement 1	4	3
		Elective Band 4				Elective Band 4		
Gm	21	German for Chemists 3	0	3	Gm 22	German for Chemists 3	0	3
		Elective Band 5				Elective Band 5		
Eh	9	Modern Lit.....2	0	2	Eh 10	Modern Lit.....2	0	2
					Pb 12	Bus. & Prof. Speaking 2	0	2

Credit will not be given for election of courses covering substantially the same ground as another elected or required course that has been passed, i.e., Ce 35 and Ce 26.

The student must register for all courses listed in the first group for his year. Courses not italicized in this group *must be passed* before he is eligible for graduation. Courss in italics may have an approved elective substituted for them.

Required for graduation: a total of 143 semester hours exclusive of Military and Physical Training. Three of these hours may be for thesis.

Departments of Instruction

Courses designated by an odd number are given in the fall semester, those designated by an even number, in the spring semester.

A course given in the first semester and duplicated in the second semester is designated by two numbers, the second of which is in parenthesis.

Two-semester courses which may be taken either semester are designated with a period between the two numbers (e.g., 1. 2); if the first semester must be taken before the second can be taken, a semicolon is used (e.g., 1; 2); if both semesters must be taken to obtain credit, a dash is used (e.g., 1-2).

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are primarily for upperclassmen and graduates; courses numbered above 100 are primarily for graduates.

CHEMISTRY AND CHEMICAL ENGINEERING

Professor Bradt; Professor Brautlecht; Professor Brann; Associate Professor Jenness; Assistant Professor Otto; Assistant Professor Gilliland; Mr. Osborn; Mr. Bogan; Mr. Tomlin; Mr. Martin; Mr. Filachione

1a; 2a. General Chemistry.—This course deals with the general principles of the science and the elements of qualitative analysis. Classroom (lectures, discussion and demonstrations), *two hours a week;* laboratory, (including recitations), *four hours a week.* One breakage card. *Four credit hours.* Mr. Bradt and Members of the Departmental Staff

1b; 2b. General Chemistry.—A course similar to Course 1a; 2a, but for students who have indicated an intention to major in Chemistry or Chemical Engineering. Equivalent to 1a, 2a. Lecture, *two hours a week;* laboratory, *four hours a week.* One breakage card. *Four credit hours.* Mr. Osborn

5. Inorganic Chemistry.—For Home Economics students only. More of the laboratory time is devoted to drill on inorganic principles than in Course 1a, 2a. Classroom, *two hours a week;* laboratory, *four hours a week.* One breakage card. *Four credit hours.* Mr. Bogan, Mr. Gilliland

21, 22. Introductory Theoretical Chemistry.—This is an introductory course in the fundamental principles of chemistry designed to prepare

students for physical chemistry. It is recommended to majors in Chemistry and Chemical Engineering as well as other students desiring a second-year elective in the Department of Chemistry. Prerequisite, Course 1a, 2a. Classroom, *two hours a week. Two credit hours.* MR. JENNESS

31. MICRO-QUALITATIVE ANALYSIS.—Systematic theoretical and laboratory study of the fundamental principle of analysis as applied to the common cations and anions. Analysis of unknowns. Microtechnique without use of the microscope. Prerequisite, Courses 1a, 2a, or 1b, 2b. Lectures and recitations, *three hours a week to mid-semester and one hour a week thereafter;* laboratory, *eight hours a week.* Two breakage cards. *Five credit hours.* MR. OTTO

40. QUANTITATIVE ANALYSIS.—An introductory course illustrating the fundamental principles of gravimetric, volumetric, and electrolysis methods. Prerequisite, Course 31. (Engineering Physics students may take this course under the heading of 40a, with *one* recitation and *six hours* of laboratory for *three credit hours.*) Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* MR. OTTO

46. SANITARY CHEMISTRY.—For Civil Engineering students taking the Sanitary Engineering option, and other qualified students. (*Two credit hours* only for Chemistry majors.) Fundamental topics of water purification and waste disposal. Prerequisite, Course 1a, 2a. Lectures and recitations, *two hours a week;* laboratory, *three hours a week.* One breakage card. *Three credit hours.* MR. BOGAN, MR. BRANN, MR. GILLILAND

48. MINERALOGY AND CRYSTALLOGRAPHY.—This course is offered in alternate years. Given in 1937-38. Prerequisite, Chemistry 31. Classroom, *one hour a week;* laboratory, *four hours a week.* One breakage card. *Three credit hours.* MR. CHASE

49. 50. THESIS.—The thesis will embody the result of the study of a special problem in the laboratory. It will partake of the nature of original investigation. Open only to seniors. Hours arranged. *One to three credit hours.* THE DEPARTMENTAL STAFF

51; 52. ORGANIC CHEMISTRY.—An introductory course dealing with aliphatic and aromatic compounds. Prerequisite, Course 31 or at least C grades in Courses 1a, 2a or 1b, 2b. (Engineering Physics students may take the fall-semester course under the heading of 51a without laboratory for *three credit hours.*) Classroom, *three hours a week;* laboratory, *four hours a week.* Two breakage cards. *Five credit hours.* MR. GILLILAND, MR. BRAUTLECHT

54. ADVANCED INORGANIC CHEMISTRY.—Advanced theoretical and descriptive inorganic chemistry emphasizing periodic relationships. Prerequi-

site, Chemistry 71. Given in alternate years. Lectures and recitations, *two hours a week. Two credit hours.* MR. OSBORN

55. CONTEMPORARY CHEMISTRY.—A study of the contemporary personalities and contributions in the field of chemistry. Prerequisite, Courses 52 and 72. Lecture, *one hour a week. One credit hour.* MR. GILLILAND

56. STRUCTURE OF MATTER.—Recent developments in the field of atomic and molecular structure; isotopes; radioactivity; etc. Prerequisite, Course 71. Given in alternate years. Not given in 1937-38. Lectures and recitations, *two hours a week. Two credit hours.* MR. BOGAN

57 (58). PRINCIPLES OF METALLOGRAPHY.—The microstructure of ferrous and non-ferrous metals and alloys with emphasis on the principles of equilibrium and physical chemistry as related to their properties. Open only to exceptional students. Prerequisite, Course 72. Lectures and recitations, *two hours a week. Two credit hours.* MR. BRADT

61. ADVANCED QUANTITATIVE ANALYSIS.—A continuation of Course 40, taking up some of the more difficult volumetric and gravimetric methods. Designed particularly for chemists. Prerequisite, Course 40. Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* MR. BRANN, MR. BOGAN

62. TECHNICAL ANALYSIS.—The analysis of certain technical products of particular interest to chemical engineers. Prerequisite, Course 40. Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* MR. BRANN, MR. BOGAN

71; 72. PHYSICAL CHEMISTRY.—This is a course in the detailed study of fundamental principles of chemistry and the application of them to various fields. Lecture, recitations, and laboratory. Prerequisites, Course 40 and Physics 1b, 2b. Calculus is very desirable. (Engineering Physics students may take the spring semester course under the heading of 72a without laboratory for *three credit hours.*) Classroom, *three hours a week;* laboratory, *four hours a week.* One breakage card. *Five credit hours.*

MR. BRANN, MR. TOMLIN

73; 74. CHEMICAL MICROSCOPY.—The technique of handling and analyzing samples of very small size. Chemical and physical changes, crystalline form, density and refractive index observed under the microscope. Unknowns, permanent slides, microphotographs, micromeasurements, etc. Open only to exceptional students. Prerequisite, Course 40. Laboratory (including recitations), *six hour a week.* One breakage card. *Two credit hours.*

MR. OTTO

76; 77; 78. Elements of Chemical Engineering.—A study of the application of unit operations to engineering practice such as heat transfer, evaporation, and distillation. Prerequisite, Course 71. Classroom, *three hours a week. Three credit hours.* Mr. Caulfield

80. Industrial Chemistry and Stoichiometry.—The course includes the necessary descriptive matter to apply stoichiometric calculations, some principles of unit operations and thermodynamics to chemical processes. One process is studied in detail and others summarized. Prerequisite, Course 76. Classroom, *three hours a week. Three credit hours.* Mr. Martin

81. 82. Chemical Engineering Laboratory.—The practice in unit operations and processes, particularly those emphasized in Courses 76, 77. Formal reports are an essential part. Prerequisite, Course 76. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.* Mr. Martin, Mr. Caulfield

84. Metallurgy.—A descriptive course dealing with ferrous and non-ferrous metals and alloys. Prerequisite, Course 1a, 2a or 1b, 2b. Chemistry and Chemical Engineering students taking this course will be expected to work advanced problems and must offer as prerequisites, Course 71, 72. Classroom, *three hours a week. Three credit hours.* Mr. Martin

85. 86. Seminar.—A study of chemical literature and chemical methods. Prerequisite, Course 52 and senior standing. Classroom, *one hour a week. One credit hour.* Mr. Bradt

87 (88). Chemical Engineering Practice.—The course consists of group investigations of the operation of equipment in neighboring industrial plants. The major portion of time is spent at the plant with additional literature and experimental work at the University. The course is open only to Chemical Engineering students in the senior or graduate years. *Time arranged. One to three credit hours.* Mr. Jenness

89. Organic Preparations.—The preparation of a large number of typical organic compounds. Prerequisite, Course 51, 52. Laboratory, *four hours a week. Two credit hours.* Mr. Gilliland

90. Organic Analysis.—Identification of pure organic compounds and the technique of preparing derivatives and manipulating small quantities of substances. Courses 40, 51, and 52 are prerequisites. Laboratory, *four hours a week. Two credit hours.* Mr. Gilliland

91. 92. Advanced Organic Chemistry.—A course involving the general and also special topics of organic chemistry. Prerequisite, Course 51; 52. Recitation, *three hours a week. Three credit hours.* Mr. Gilliland

93; 94. Economics of Chemistry and Chemical Engineering.—Economic relationships of chemistry as applied in industry; designed to acquaint the student with fundamentals pertaining to the supply and demand of chemical products; production and distribution costs, prices, markets; plant location and design, evolution of the chemical industries, unit process costs, management, operation and control. Text, problems, reports and current journal assignments. Prerequisite, Course 71. Classroom, *two hours a week. Two credit hours.* Mr. Brautlecht

95. Thermodynamics.—A brief study of the laws of thermodynamics as applied to chemical problems. Prerequisite, Course 71, 72. Classroom, *three hours a week. Three credit hours.* Mr. Brann

96. Electrochemistry.—A brief review of the theory followed by a study of the more important industrial applications. Prerequisite, Course 71, 72. Classroom, *three hours a week. Three credit hours.* Mr. Brann

97, 98. Methods of Teaching Chemistry.—A course for prospective teachers of chemistry, which includes administration, supervision, costs; laboratory arrangement, equipment, maintenance and supplies; preparation of solutions, demonstrations, lesson plans, testing programs; texts, laboratory manuals; grading and scoring; bibliography. Text, problems, and journal assignments. For juniors, seniors, and graduate students. Prerequisite, Course 1a, 2a, or equivalent. Classroom, *two hours a week. Two credit hours.* Mr. Brautlecht

101, 102. Investigations and Thesis in Organic Chemistry.—Open only to graduate students. *Time and credit, arranged.*

The Departmental Staff

103, 104. Investigations and Thesis in Physical Chemistry.—Open only to graduate students. *Time and credit, arranged.*

The Departmental Staff

105, 106. Investigations and Thesis in Analytical Chemistry.—Open only to graduate students. *Time and credit, arranged.*

The Departmental Staff

107, 108. Investigations and Thesis in Inorganic Chemistry.—Open only to graduate students. *Time and credit, arranged.*

The Departmental Staff

109, 110. Investigations and Thesis in Chemical Engineering.—Open only to graduate students. *Time and credit, arranged.*

The Departmental Staff

Equipment obtained and receipted for by a student and not returned at the end of a course in good condition, as well as a few non-returnable

supplies and a few special chemicals, will be charged to the student at cost. The supply room will be open during all laboratory periods. Breakage cards may be obtained only at the Treasurer's office, and all students taking chemical laboratory courses are required to have one or more. The unused balance is redeemable at the Treasurer's office, after obtaining clearance at the chemistry storeroom.

For courses in biochemistry, see the description of courses given by the Department of Bacteriology and Biochemistry.

For requirements leading to the degree of Bachelor of Arts in Chemistry, see section devoted to the College of Arts and Science.

CIVIL ENGINEERING

Professor Evans; Professor Sprague; Associate Professor Lyon; Associate Professor Leavitt; Assistant Professor Chase; Mr. Stephenson; Mr. Bennett; Mr. Lendo

1. Plane Surveying.—Recitations and lectures covering the general theory of plane surveying and plotting. A study of surveying instruments, their adjustments and use, followed by a study of the methods commonly used for surveying and plotting. Classroom, *three hours a week. Three credit hours.* Mr. Stephenson

2. Plane Surveying.—Recitations and lectures covering surveying instruments and their use, followed by a discussion of the various methods commonly used for Plane Surveying. Prerequisite, Mathematics 1. Classroom, *two hours a week for twelve weeks;* field work, *three hours a week* and classroom *one hour a week for six weeks. Two credit hours.*

Mr. Stephenson

3. Field Work and Plotting.—This course consists of practice in the use of the tape, compass, transit, and level, followed by practice in the common methods of map drawing. Field and drawing room, *nine hours a week. Three credit hours.* Mr. Stephenson, Mr. Lendo

4. Surveying.—The historical background of surveying, the legal principles involved when surveys and resurveys are made, and the common methods employed will be emphasized. Not open to students who have had other surveying courses. Classroom, *two hours a week;* field and office, *two hours a week. Three credit hours.* Mr. Stephenson

6. Land Surveying.—This course is designed to familiarize the student with the methods employed by the General Land Office for laying out

public lands and with such other methods as may have been used by the various states. Prerequisites, Courses 1 and 3. Classroom, *two hours a week;* field work, *nine hours a week during the last six weeks. Three credit hours.*
MR. STEPHENSON

8. CONSTRUCTION SURVEYING.—A course covering the various problems which the man surveying for various types of construction encounters. The legal aspect of surveying, methods employed, and the necessary computations are studied. Prerequisites, Courses 1 and 3. Classroom, *two hours a week;* field work, *nine hours a week during the last six weeks. Three credit hours.*
MR. LYON

10. CURVES AND EARTHWORK.—A course of recitations and lectures investigating the geometry of simple, compound, and reverse circular curves, transition curves, vertical curves, and earthwork. Prerequisites, Courses 1 and 3. Classroom, *three hours a week. Three credit hours.* MR. LYON

12. ECONOMIC GEOGRAPHY.—Deals with the principles of geography, especially applied to the common economic products, treating their distribution, characteristics, and uses. Classroom, *three hours a week. Three credit hours.*
MR. CHASE

13. PHYSICAL GEOLOGY.—Introduction to general dynamical geology; it covers the materials, agents, and processes of geology. Classroom, *three hours a week. Three credit hours.* MR. CHASE

14. HISTORICAL GEOLOGY.—A review of the earth's history; its past land distribution, mountain revolutions, rock formations, climates and living forms. Classroom, *three hours a week. Three credit hours.* MR. CHASE

16. GEOLOGY.—Introduction to geological materials, agents, and processes of particular interest to the engineer. Classroom, *two hours a week. Two credit hours.*
MR. CHASE

17. ECONOMIC GEOLOGY.—Introduction to ore deposits; their characteristics, distribution, production, and uses of both metals and non-metals. Classroom, *two hours a week. Two credit hours.* MR. CHASE

20. STRUCTURAL AND HIGHWAY MATERIALS.—Laboratory and recitations covering the methods of testing, characteristics of, and specifications for the materials commonly used for structural and highway purposes. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.*
MR. LEAVITT, MR. SPRAGUE, MR. STEPHENSON, MR. LENDO

23. ADVANCED SURVEYING.—This course consists of lectures, readings, and recitations on the theory and practice of base-line measurement, triangulation, precise leveling, topographical surveying, hydrographic surveying, the

use of the plane table and sextant, the theory and application of least squares, and map projection. Prerequisites, Courses 1 and 3. Lecture, recitation, and problems, *one hour a week. One credit hour.* MR. LYON

25. ENGINEERING GEOLOGY.—Characteristics of building stones and other earth features with which the civil engineer deals. Prerequisite, Course 16. Classroom, *two hours a week;* laboratory, *three hours a week. Three credit hours.* MR. CHASE

26. HYDRAULICS.—Fundamental data; hydrostatics; theoretical hydraulics; instruments and observations; theoretical and actual flow through orifices, weirs, tubes, pipes, and conduits; dynamic pressure of water. Prerequisite, Mechanics 51. Classroom, *three hours a week. Three credit hours.* MR. LYON

28. SOIL TESTING.—A laboratory course in soil testing as applied to soil mechanics. The principles of the tests and interpretation of test results are explained and discussed in the classroom. Prerequisite, Mechanics 51. Recitation, *one hour a week;* laboratory, *three hours a week, for first twelve weeks. One and one-half credit hours.* MR. BENNETT

29. HIGHWAY CONSTRUCTION.—The construction and maintenance of city pavements and country roads under various conditions of traffic, climate, soil, etc. Prerequisites, Courses 1 and 10. Recitation, *two hours a week. Two credit hours.* MR. LEAVITT

33. SANITARY ENGINEERING AND WATER SUPPLY.—An introductory course outlining the engineering problems which are involved in designing and operating municipal water supply, and sewage disposal systems. Classroom, *two hours a week,* laboratory, *three hours a week. Three credit hours.* MR. SPRAGUE

35. HYDRAULICS.—A short course which includes the main principles given in Course 26. Given to students in the Departments of Mechanical and Electrical Engineering. Prerequisite, Mechanics 51. Classroom, *two hours a week. Two credit hours.* MR. LYON

49. 50. THESIS WORK.—The study of and report upon some original investigation or design. See regulations regarding degrees. *Time to be arranged. Two or three credit hours.* MR. EVANS AND STAFF

51. HYDRAULIC ENGINEERING, OFFICE WORK.—From notes previously taken in the field, rating curves and vertical velocity curves are plotted and studied and discharge measurements are computed; also problems in hydrology, water storage, and water power are studied. Prerequisites, Courses 26 and 51s. Course 55 must be concurrent. Drawing room, *four hours a week. Two credit hours.* MR. LYON

52. Theory and Design of Steel Structures.—This course involves the determination of stresses and strain in beams, girders, and trusses under the usual systems of loading. Students are required to make a complete design of several types of structures. Prerequisite, Mechanics 51. *Five hours a week. Five credit hours.* Mr. Evans

53. Hydraulic Engineering, Office Work.—A course similar to but shorter than Course 51. Prerequisites, Courses 26 and 51s. Drawing room, *two hours a week. One credit hour.* Mr. Lyon

55. Hydrology.—A study of stream-flow as applied to water-power development; rainfall; evaporation; run-off; methods of obtaining data with a study of their use. Prerequisite, Course 26. Classroom, *two hours a week. Two credit hours.* Mr. Lyon

56. Hydraulic Engineering.—A continuation of Courses 51 and 55. The development and utilization of water power; the modern turbine; inspection of hydro-electric plants. Drawing room, *four hours a week. Two credit hours.* Mr. Lyon

57. Concrete Structures and Foundations.—This course covers the design and construction of plain and reinforced concrete structures with due consideration for preparing the foundation to receive such structures. Prerequisite, Mechanics 51. *Five hours a week. Five credit hours.* Mr. Evans

59. Drafting.—This course consists of detailing the structures designed in Course 52. Drawing room, *nine hours a week. Three credit hours.* Mr. Sprague

60. Drafting.—The structures designed in Course 52 are detailed in this course. *Six hours a week. Two credit hours.* Mr. Sprague

62. Soil Mechanics.—A study of the fundamental principles underlying Soil Mechanics with application to practical foundation problems. Prerequisite, Mechanics 51 or 53, also Course 28. Classroom, *three hours a week for the first twelve weeks. Two credit hours.* Mr. Bennett

63. Highway Economics.—State highway and municipal highway management as they affect organization, administration, and finance of streets and highways; economic factors of highway location, design and operation; traffic and operation expenses. Prerequisites, Courses 29 and 11s. *Three hours a week. Three credit hours.* Mr. Leavitt

68. Highway Design.—Drawing room study of highway location and relocation, including plans of proposed improvement and construction of about five miles of highway with detailed estimates and specifications for the same. Also design of street intersections. Prerequisite, Course 63. Drawing room, *four hours a week. Two credit hours.* Mr. Leavitt

71. Water Supply.—This course deals with the requirements of a community for pure drinking water. It makes a study of sources of supply, quality, and purification of water; the engineering works necessary for its transportation; water-borne diseases; fire service. Prerequisite, Course 33. Classroom, *two hours a week. Two credit hours.* Mr. Sprague

72. Highway Engineering.—An advanced course of lectures and recitations on various highway problems; general survey of higher types of pavements; city planning; specifications; cost keeping; maintenance and repair work as discussed in engineering periodicals. Prerequisite, Course 63. Classroom, *two hours a week. Two credit hours.* Mr. Leavitt

74. Sanitary Engineering.—Lectures and recitations dealing with municipal and rural sanitation. Sanitation of milk and other foods; control of mosquitoes, flies, and rodents. Prerequisite, Course 33. Classroom, *two hours a week. Two credit hours.* Mr. Sprague

79. Structural Geology.—Principles and characteristics of earth structures. Prerequisite, Course 25. Classroom, *two hours a week. Two credit hours.* Mr. Chase

82. Advanced Engineering Geology.—Application of geology to engineering construction. Prerequisite, Course 25. Classroom, *three hours a week. Three credit hours.* Mr. Chase

102. Theory of Structures.—This course involves the determination of stresses in statically indeterminate structures. It is a continuation of Course 52 and is open only to those men who have passed that course or its equivalent satisfactorily. Classroom, *three hours a week. Three credit hours.* Mr. Evans

Courses To Be Offered at Summer Camp

7s. Highways and Railroads.—Preliminary and location surveys for railways and highways, particularly forest highways. Grades are established and grade stakes set. The preparation of maps from notes previously taken and calculations of earthwork. Trail location and construction. Prerequisites, Courses 1 and 3. *Two credit hours.*

11s. Highway and Railroad Surveys.—This course consists of making preliminary and location surveys for a highway and a railroad, each approximately two miles in length, establishing grades and setting grade stakes. The notes are plotted and calculations are made as to the amount of earthwork. Prerequisites, Courses 1, 3, and 9. *Three credit hours.*

24s. Geodetic and Topographic Surveying.—This field work consists of making topographic surveys with the transit and plane table, including triangulation, the use of sextant, trigonometric levelling and the traverse plane table. The drafting room work consists of making computations and drawings necessary to interpret the results of the field observations. Prerequisites, Courses 1, 3, and 23. *Two credit hours.*

51s. Hydrographic Surveying.—(a) *Stream Gauging.* This course is planned to instruct the student in the principles underlying the measurement of flow of water in open channels. (b) *Soundings.* This part of the course takes up the methods of making soundings and practices the use of surveying instruments for locating them. Prerequisite, Course 26. *One credit hour.*

ELECTRICAL ENGINEERING

Professor Barrows; Professor Hill; Associate Professor Creamer; Assistant Professor Roberts; Mr. Crabtree; Mr. Seal

1; 2. Elements of Electrical Engineering.—Fundamental laws and principles of electricity; series and parallel circuits; the magnetic circuit; the dielectric circuit; conduction through electrolytes and gases; thermionics; instrument calibration; electrical measurements. Recitations and problems. Prerequisite, Physics 1, 2 and Mathematics 1, 3. Classroom, *two hours a week;* computation, *three hours a week;* laboratory, *two hours a week. Four credit hours.* Mr. Barrows, Mr. Creamer, Mr. Seal

1p; 2p. Elements of Electrical Engineering.—Same as Course 1, 2 except that laboratory is omitted. (For students majoring in Engineering Physics who do not wish to take laboratory.) Classroom, *two hours a week;* computation, *three hours a week. Three credit hours.*

5a (6a). Household Equipment.—Physical principle, use, and selection of various household appliances. Elementary principles of heat and electricity, household heating and ventilating systems, laundry procedure, refrigerators, all types of kitchen ranges, and all small electrical appliances are considered. Course required of senior Home Economics students. Lecture, *one hour a week;* recitation, *one hour a week;* laboratory, *two hours a week. Three credit hours.* Mr. Seal

13. Electronics.—The theory of electron tubes; hard vacuum diodes, triodes, tetrodes, pentodes, photocells, etc.; gaseous tubes utilizing neon, argon, and mercury vapor; arcs, corona, and other discharges; tube detector,

amplifiers, oscillators, and associated circuits; functioning of the dynatron and magnetron; crystal and magneto-striction oscillators; electrical measurements; industrial applications. Prerequisite, Course 2. Course 15 is required concurrently. Classroom, *two hours a week;* laboratory, *three hours a week. Three credit hours.* MR. CRABTREE

15; 16. ELECTRIC CIRCUITS AND MACHINERY.—Fundamental theory of sinusoidal alternating currents, including representation by vectors and solutions by trigonometric and algebraic methods. Underlying principles and circuit problems common to all types of electrical apparatus; design and performance of direct-current machinery. Theory of polyphase alternating-current systems, non-sinusoidal wave forms, and electrical transmission. Introduction to the analysis of transient phenomena. Lectures, recitations, and problems. Prerequisite, Course 2. Fall semester: classroom, *three hours a week. Three credit hours.* Spring semester: classroom, *three hours a week.* Computation, *three hours a week. Four credit hours.* MR. HILL

17; 18. ELECTRICAL LABORATORY.—Electrical measurements; operation and testing of direct-current generators and motors. Introductory experiments of alternating-current circuits and machines. Application of the work of Courses 1, 2, 15, and 16. Prerequisite, Course 2; Courses 15 and 16 are concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* MR. ROBERTS, MR. CRABTREE

22. TELEPHONE COMMUNICATION.—Characteristics of speech: the hearing mechanism; mechanical and electrical characteristics of telephone apparatus; the subscriber's set; common battery and local battery circuits; dial systems; repeaters; traffic studies. Lectures and recitations. Prerequisite, Course 15. Course 24 is required concurrently. Classroom, *three hours a week. Three credit hours.* MR. CREAMER

24. TELEPHONE LABORATORY.—Microphonic efficiency of telephone apparatus; measurements of articulation and audition; local and common battery systems; phantom and composite circuits; repeaters; transmission testing. Course 22 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* MR. CREAMER

30 (35). DIRECT CURRENT MACHINERY.—Electrical principles and applications; the production, distribution, and utilization of power from the standpoint of the civil, mechanical, and chemical engineer. Recitations and problems. Clasroom, *two hours a week. Two credit hours.*

MR. ROBERTS, MR. CRABTREE

31 (36). ALTERNATING CURRENTS.—Alternating current measurements and calculations; operation of generators and motors. Lectures, recitations,

and problems. Prerequisite, Course 30 or 35. Classroom, *two hours a week. Two credit hours.* MR. ROBERTS, MR. CRABTREE

33 (38). ELECTRICAL LABORATORY.—This course is based on Courses 30, 31, 35, and 36. Operations of direct-current and alternating-current generators and motors; electrical power measurements. Prerequisite, Course 30 or 35; Course 31 or 36 concurrent. Laboratory, *three hours a week. One and one-half credit hours.* MR. ROBERTS, MR. CRABTREE

49, 50. THESIS WORK.—The study of and report upon some original investigation or design. *Time to be arranged.* See regulations regarding degrees. *One to three credit hours.* MR. BARROWS, MR. HILL, MR. CREAMER

INSPECTION TRIP.—About a week's trip visiting some of the electrical and industrial plants of New England. MR. BARROWS

51. ALTERNATING CURRENT APPARATUS.—Continuation of Course 16. Theory, construction, and operating characteristics of alternating-current apparatus and machinery. Polyphase apparatus; generation, distribution, and utilization of polyphase power. Lectures, recitations, and problems. Prerequisite, Course 16. Classroom, *three hours a week*; computation, *four hours a week. Five credit hours.* MR. BARROWS

56. ELECTRICAL POWER PLANTS.—Electrical equipment of power plants, methods of control, switching, protection, lightning arresters; arrangement of station and substation machinery, apparatus, and switchboards. Lectures and recitations. Prerequisites, Courses 15, 16, and 51. Classroom, *three hours a week. Three credit hours.* MR. BARROWS

58. ELECTRICAL POWER TRANSMISSION.—Theory, design, and calculation of power-transmission systems. Problems of inductive interference, insulation, protection, stability, and control. Lectures, recitations, and problems. Prerequisites, Courses 16 and 51. Classroom, *two hours a week*; supervised computation, *three hours a week. Three credit hours.* MR. ROBERTS

60. ADVANCED ELECTRICAL MACHINERY.—Analysis of windings and magnetic circuits of electric power apparatus. Advanced problems on flux distribution, commutation, heat paths, air flow, and mechanical stresses. Design of alternating-current machinery. Predetermination of performance characteristics. Lectures and problems. Prerequisite, Course 51. Classroom, *three hours a week. Three credit hours.* MR. HILL

61. ILLUMINATING ENGINEERING.—Different types of lamps; light, photometry, illumination calculations, and problems of interior and exterior illumination. Lectures, recitations, and problems. Classroom, *three hours a week. Three credit hours.* MR. BARROWS

63. Electrical Transportation.—Mechanics of vehicle movement; estimates of power and energy requirements of trains and other transportation units. Engineering and economic principles governing the selection and design of electrical equipment for railways, buses, elevators, and ships. Lectures, recitations, and problems. Prerequisite, Course 15, 16. Course 51 is concurrent. Classroom, *three hours a week. Three credit hours.* Mr. Hill

75; 76. Electrical Laboratory.—Alternating-current instruments and measurements; experimental work on single-phase circuits and polyphase systems. Operation and testing of alternating-current generators, motors, transformers, and converters. Prerequisites, Courses 15, 16, 17, and 18; Course 51 is concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* Mr. Roberts

81. Communication Engineering.—Network theory; equivalent circuits; filters; equalizers; carrier-current systems. Lectures and problems. Prerequisite, Course 22. Computation, *six hours a week. Two credit hours.* Mr. Creamer, Mr. Crabtree

83. Communication Laboratory.—Advanced measurements on communication apparatus; repeaters; carrier-current systems; audio-frequency amplifiers; filters; transformers; loud speakers and microphones. Prerequisite, Course 22. Course 81 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Crabtree

84. Telephone Transmission.—Application of hyperbolic functions to transmission line problems; transmission of speech over cable and open wire circuits; loaded lines; design of artificial lines. Lectures and problems. Prerequisite, Course 81. Computation, *six hours a week. Two credit hours.* Mr. Creamer, Mr. Crabtree

85; 86. Radio Engineering.—Detailed study of inductance coils, condensers, and resistors for radio frequencies; vacuum-tube theory; extended analysis of oscillatory circuits and methods of excitation; radiation and transmission phenomena; comparisons of methods of transmission and reception; theory of modulation; radio measurements. Lectures, recitations, and design problems. Prerequisite, Course 22. Fall semester: classroom, *one hour a week;* computation, *two hours a week. Two credit hours.* Spring semester: classroom, *two hours a week;* seminar, *two hours a week. Three credit hours.* Mr. Creamer

87. Engineering Acoustics.—This course, which is closely correlated with Courses 81, 85, and 86, deals with studio and theater acoustics, and the dynamical systems of microphones, receivers, and loud speakers. Lectures, recitations, and problems. Prerequisite, Course 22. Classroom, *two hours a week. Two credit hours.* Mr. Creamer

88. Radio Laboratory.—Use of wave-meters; radio-frequency amplifiers; tests of tube transmitters and receivers; continuous wave and radiophone transmission at various frequencies; radio directionals; field strength measurements. Course 86 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Crabtree

91; 92. Theory of Electricity.—A study of the more advanced mathematical and physical theories of electricity with reference to their engineering applications. Wave propagation, radiation, gaseous conduction, and the analysis of transient phnomena by the methods of Heaviside's operational calculus. Problems, conferences, and seminar. Either or both semesters. *Two credit hours.* Mr. Cloke, Mr. Hill

156. Advanced Electrical Power Plants.—Study of the latest designs and methods of central station practice. Location, parallel operation, super-power practice, and economics. Lectures, studies, and problems. Prerequisites, Courses 51, 56, and 76. Classroom, *two hours a week. Two credit hours.* Mr. Barrows

157; 158. Advanced Electrical Power Transmission.—A detailed study of the advanced theory of electric power circuits in the normal steady state and under transient and unbalanced conditions. Analysis of the performance of transmission systems, distribution networks, and connected apparatus. Engineering and economic problems of design, construction, and operation. Lectures, analytical studies, and problems. Prerequisite, Course 58. Classroom, *two or three hours a week. Two or three credit hours.* Mr. Hill

165; 166. Advanced Theory of Electrical Machinery.—Analytical study of electrical machinery with emphasis on methods useful in research and development. Analysis of behavior in transient states and under abnormal condition of operation. Lectures, problems, seminar papers, and reviews. Prerequisite, Course 60. Course 175 is concurrent. Classroom, *two or three hours a week. Two or three credit hours.* Mr. Hill

175. Electrical Laboratory.—Advanced tests of electrical machines and circuits as related to design and development. Performance studies involving the use of the oscillograph. Prerequisites, Courses 51, 60, and 76. Course 165 is concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* Mr. Barrows

185. Communication Networks.—Advanced study of passive networks, including filters and attenuation equalizers; transformer and transition losses; high-quality circuits used as an adjunct to radio broadcasting; advances in communication from study of current technical literature. Lec-

tures, reports, and problems. For graduate students who have specialized in electrical communication. Classroom, *two hours a week. Two credit hours.*
Mr. Creamer

186. High Frequency Phenomena.—Advanced analytical treatment of topics considered in Course 85, 86 including circuits, apparatus, and radiation phenomena. For graduate students having a knowledge of differential equations and of vector analysis. Prerequisite, Courses 85 and 86. Classroom, *two hours a week. Two credit hours.* Mr. Creamer

187. Radio Seminar.—A thorough, critical study of a limited number of important current developments in radio engineering. For graduate students who have specialized in electrical communication. Prerequisite, Course 85, 86. Classroom, *two hours a week. Two credit hours.* Mr. Creamer

188. Circuits Laboratory.—Experimental work based on theory treated in Course 185; oscillographic study of speech sounds and modulation; detection and elimination of speech distortion in amplifiers. Prerequisite, Course 185. Laboratory, *three hours a week. One and one-half credit hours.*
Mr. Creamer

ENGINEERING DRAFTING

Professor Kent; Assistant Professor Sawyer; Mr. McNeary

1. Fundamentals of Drafting.—Instruction and practice in technical sketching and lettering, in the care of drawing instruments, and their use in elementary problems involving right lines, circles, irregular curves, and orthographic projections. Drawing room, *four hours a week. Two credit hours.* Mr. Kent, Mr. Sawyer, Mr. McNeary

2. Elementary Machine Drafting.—A continued study of the methods of orthographic projection, isometric projection, and oblique projection, accompanied by instruction and practice in the making of working drawings and tracings. Drawing room, *four hours a week. Two credit hours.*
Mr. Kent, Mr. Sawyer, Mr. McNeary

2a. Drafting.—Continuation of orthographic projections, with isometric and perspective projections, topographical symbols and their application, map reproduction and enlarging, and blueprinting. Drafting room, *four hours a week. Two credit hours.* Mr. Sawyer, Mr. McNeary

3. Descriptive Geometry.—The elementary principles and problems of descriptive geometry, including intersections and developments. Recitation and drawing room, *six hours a week. Two credit hours.*
Mr. Kent, Mr. Sawyer, Mr. McNeary

4. Advanced Machine Drafting.—A continued study of the making of working drawings of simple machines, together with instruction and practice in blueprinting. Drawing room, *six hours a week. Two credit hours.*
Mr. Kent, Mr. Sawyer, Mr. McNeary

9; 10. Agricultural Drafting.—A course designed especially for students in Agriculture and for others who are not engineers. It combines the fundamental principles of Courses 1 and 2. Drawing room, *four hours a week. Two credit hours.* Mr. Kent

54a. Shades and Shadows.—A study of the principles of the casting of shadows on and by achitectural objects. A half-semester course. Prerequisite, Course 1. Drafting room, *four hours a week. One credit hour.*
Mr. Kent

54b. Perspective.—A study of the principles of architectural perspective and the making of the same. A half-semester course. Prerequisite, Course 1. Drafting room, *four hours a week. One credit hour.* Mr. Kent

ENGINEERING PHYSICS

See course descriptions under Physics Department, College of Arts and Sciences, p. 207.

LECTURE COURSES

Gc 5. Orientation.—A course of lectures by members of the staff of the College and other faculty members for Technology freshmen. Designed to better acquaint them with the different fields of study and the opportunities in these fields. Given Wednesday afternoons at 4:15 throughout the first semester. *One-half credit hour.* Mr. McNeary, Mr. Cloke

Gc 6. Orientation.—A general lecture course given Wednesday afternoons at 4:15 throughout the second semester, consisting of addresses by engineers and business and professional men for Technology freshmen. Open to the public. *One-half credit hour.* Mr. McNeary, Mr. Cloke

MECHANICAL ENGINEERING

Professor Sweetser; Professor Watson; Assistant Professor Prageman; Mr. Davee; Mr. Perkins; Mr. Sparrow; Mr. Lekberg

1. Foundry and Forge Work.—Foundry instruction is given in bench and floor molding, mixing of materials, core making, operation of cupolas,

etc. Forge instruction is given in drawing, upsetting, forming, welding, and tool dressing. Shop work, *six hours a week. Two credit hours.* MR. DAVEE

2. PATTERN WORK.—Bench work and wood turning to familiarize the student with the tools used in modern woodworking practice, and to give him experience in working from dimensioned drawings. Pattern work, consisting of making complete patterns and core boxes from drawings. Shop work, *six hours a week. Two credit hours.* MR. DAVEE

7; 8. MACHINE WORK.—A small piece of machinery is manufactured which involves a study of the principles and operation of the various machine tools, at the same time including an insight into that phase of manufacturing which requires one part to fit another properly and the entire machine to be readily assembled. Shop work, *six hours a week. Two credit hours.* MR. PERKINS

9; 10. MACHINE WORK.—A shorter course than 7, 8, for electrical engineers. Shop work, *four hours a week. One and one-half credit hours.* MR. PERKINS

21. ELEMENTS OF MECHANICAL ENGINEERING.—A course designed to familiarize the student with the mechanical apparatus of manufacturing and power plants, and elementary mechanical-engineering calculations. Classroom, *two hours a week. Two credit hours.* MR. LEKBERG

27. KINEMATICS.—A shorter course than 55, arranged for electrical engineers. Recitations, *three hours a week. Three credit hours.* MR. LEKBERG

32. MATERIALS OF ENGINEERING.—Properties of the metals; production from ores; heat treatment; methods of testing. Classroom, *two hours a week. Two credit hours.* MR. LEKBERG

38. MECHANICAL LABORATORY.—Elementary experimental work such as calibration of instruments, use of steam and gas engine indicators, mechanical efficiency tests, etc. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW, MR. LEKBERG

39. MECHANICAL LABORATORY.—A course arranged for seniors in Civil Engineering. Testing of strength of materials; measurement of flow of water over weirs, through orifices and nozzles; calibration of venturi meters. Prerequisite, Civil Engineering 26 or 35. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW

40. MECHANICAL LABORATORY.—A course arranged for seniors in Chemical Engineering. Calibration of instruments; tests of engines; measurement of flow of water; tests of lubricants. Prerequisite, Course 43. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW

41. Mechanical Laboratory.—A course arranged for seniors in Electrical Engineering. Calibration of instruments; testing strength of materials; testing of steam engines, gas engines, hydraulic testing. Prerequisite, Course 44. Laboratory, *three hours a week. One and one-half credit hours.*

Mr. Sparrow

43. Heat Engineering.—A short course for senior chemical engineers covering the laws of thermodynamics and their application to heat motors, air compressors, refrigerating machinery, and power plant equipment. Recitation, *three hours a week. Three credit hours.* Mr. Sparrow

44. Heat Engineering.—A course similar to Course 79, given to electrical engineers. Prerequisites, Mathematics 8 and Physics 2. Recitation, *three hours a week. Three credit hours.* Mr. Sparrow

45. Heat Engineering.—Simple and compound steam engines; steam turbines; gas engines; gas producers; fuels and combustion; steam and gas power-plant equipment and operation. For seniors in Electrical Engineering. Prerequisite, Course 44. Recitation, *three hours a week. Three credit hours.*

Mr. Sparrow

46. Heat Power.—Fuels and combustion, steam and gas power-plant equipment; arrangement, operation, and efficiencies of various types of apparatus. Prerequisite, Course 79. *Three hours a week. Three credit hours.*

Mr. Watson, Mr. Sparrow

50. Thesis.—The results of some original investigation or design presented in proper form. The subject should be selected early in the fall semester of the senior year. See regulations regarding degrees. *Three credit hours.* Mr. Sweetser and Staff

55. Kinematics.—A study of motion, velocity, and acceleration of machine parts, supplemented by drawings of cams, gear teeth, and graphical studies of kinematical problems. Classroom, *three hours a week;* drawing room, *three hours a week. Four credit hours.* Mr. Prageman, Mr. Lekberg

66. Machine Design.—A study of the design of machines; proportioning of parts for strength, rigidity, etc. Prerequisites, Course 55 and Mechanics 51. Classroom, *two hours a week.* Drawing room, *three hours a week. Three credit hours.* Mr. Prageman, Mr. Lekberg

69; 70. Mechanical Laboratory.—Tests of materials, heating value of liquid and gaseous fuels, steam calorimetry, thermal efficiency, economy, and heat balance tests of steam engines, steam turbines, and gas engines. Prerequisite, Course 38. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Watson, Mr. Sparrow

71; 72. Mechanical Laboratory.—Tests of condensers, boilers, air compressors, pumps, fans, hydraulic testing. Prerequisite, Course 70. Laboratory, *three hours a week. One and one-half credit hours.*

Mr. Watson, Mr. Sparrow

78. Hydraulic Laboratory.—A course arranged for students taking Hydraulic option in Civil Engineering. Testing of impulse and reaction water wheels, flow measurement and friction in pipes and channels, etc. Prerequisite, Course 39. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Sparrow

79. Heat Engineering.—Laws of thermodynamics; laws of gases, saturated and superheated vapors; Carnot's, Rankine's, and actual steam engine cycles; use of steam tables; steam calorimetry; illustrative practical problems. Prerequisites, Mathematics 8 and Physics 1b, 2b, and 21 or 22. Recitation, *three hours a week. Three credit hours.* Mr. Watson

80. Heat Engineering.—Simple and compound steam engines, flow of steam, air compressors; flow of air; refrigeration. Prerequisite, Course 79. Recitation, *three hours a week. Three credit hours.* Mr. Watson

81. Heat Engineering.—A continuation of Courses 79 and 80, dealing with steam turbines; considerations affecting the design and efficiency of operation of the various types. Recitation, *two hours a week;* drawing room, *three hours a week. Three credit hours.* Mr. Sweetser, Mr. Watson

83. Industrial Management.—Lectures and recitations on the various types of organization for industrial enterprises and systems of management. It deals with types of ownership, control, selection of plant site, and the elements of machine production, time and motion study, wage systems, and selection of personnel. Prerequisites, Course 66 and Economics 2a and 10. Course 87 accompanying. Not given in 1937-38. Classroom, *four hours a week. Four credit hours.*

84a. Industrial Engineering.—A study of time keeping and cost-finding systems; methods of planning work; time and motion study; plant location and arrangement; heating, lighting, and powering; safety engineering and fire protection. Prerequisite, Course 83. Not given in 1937-38. Classroom, *two hours a week. Two credit hours.*

84b. Industrial Engineering Problems.—Design and layout of a plant including selection and location of machinery for the manufacture of some small machine or an assembly of part of a machine. A solution of the cost problems, planning, routing, and scheduling, and the development of organization charts. A detailed study of distribution of overhead expense, and practice in making and using time studies and rate tables. Course 84a

concurrent. Not given in 1937-38. Drawing room, *four and one-half hours a week. One and one-half credit hours.*

85. Industrial Relations.—A study of employer and employee relations, the effect of organized labor, employment methods, methods of wage payments, industrial education, and personnel service. Not given in 1937-38. Classroom, *two hours a week. Two credit hours.*

86. Power Plants.—Design, costs, operating expenses, and economics of steam and gas power plants. Prerequisite, Course 81. Classroom, *three hours a week. Three credit hours.* Mr. Sweetser

87. Machine Design.—A continuation of Course 66, including the execution of the design of some typical machines. Prerequisites, Courses 55 and 66. Drawing room, *six hours a week. Two credit hours.*
Mr. Prageman, Mr. Lekberg

88. Dynamics of Machines.—A study of the forces due to reciprocating and rotating masses with special application to balancing high-speed machinery, designing governors and flywheels. Prerequisites, Courses 55 and 66. Recitation, *two hours a week;* drawing room, *three hours a week. Three credit hours.* Mr. Prageman

90. Engineering Cost Accounting.—A detailed study of manufacturing cost systems, the use of standard costs in price estimating, the relation of economic considerations to pricing policies. Prerequisites, Course 83 and Economics 9, 10. Classroom, *two hours a week;* drawing room, *three hours a week. Three credit hours.*

91. Heating and Ventilation.—Heat resistance of building materials, calculation of heat losses through various types of walls, windows, etc., heating systems, ventilating systems, humidification. Prerequisite, Course 80. Recitation, *two hours a week. Two credit hours.*
Mr. Watson, Mr. Prageman

93. Gas Engines.—Types, operation, fuels and combustion, carburetion, ignition, valves, cooling, governing, determination of cylinder sizes for given fuel and horsepower. Prerequisites, Courses 66 and 79. Classroom, *three hours a week. Three credit hours.* Mr. Sweetser

94. Hydraulic Machinery.—Hydraulic turbines; water wheels, various features of hydraulic power plant development. Prerequisites, Mechanics 52, Civil Engineering 26 or 35, and Mechanical Engineering 55. Recitation, *three hours a week. Three credit hours.* Mr. Prageman

98. Factory Organization and Management.—Lectures and assigned reading bearing upon various types of organization for industrial en-

terprises; planning and equipping of factory plants; systems of management; factory design and construction. Recitation, *two hours a week. Two credit hours.* MR. PRAGEMAN

101. 102. METALLOGRAPHY.—Polishing, etching, and a microscopic study of the crystalline structure of metals. A study of the effect of heat treatment on the crystalline structure and physical properties of steel. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.*

MR. SWEETSER

103. 104. ADVANCED FLUID FLOW.—A more theoretical study of flow of gases, vapors, and fluids than in undergraduate courses. Application to fans, blowers, compressors, steam turbines, refrigeration machinery, pumps, piping, and lubrication problems. Laws of similitude, effects of viscosity, applications of dimensional analysis. Classroom, *three hours a week. Three credit hours.* MR. SWEETSER, MR. WATSON

INSPECTION TRIP.—A visiting trip of one week's duration to various manufacturing and power plants. This trip is open only to seniors who are eligible for graduation. A complete schedule of the trip is prearranged and a member of the Department staff is in charge of the party.

MECHANICS

PROFESSOR WESTON

51; 52. MECHANICS.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; exercises in finding center of gravity and moment of inertia; the study of stresses and strains in bodies subject to tension, compression, and shearing; the common theory of beams, including shearing force, bending moment, and elastic curves; torsional stresses and theories of stress in long columns. Recitation, *five hours a week. Five credit hours.*

53; 54. MECHANICS.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; the study of simple stresses and strains with such applications as the time permits. Recitation, *three hours a week. Three credit hours.*

101. 102. ADVANCED MECHANICS.—General principles of kinematics, statics, and kinetics; the mathematical theory of elasticity; the theory of the potential function with applications to problems in gravitation, hydro-mechanics, etc. Recitation, *two hours a week. Two credit hours.*

PULP AND PAPER TECHNOLOGY

PROFESSOR BRAY; ASSISTANT PROFESSOR CAULFIELD

49. 50. THESIS.—The thesis will embody the result of the study of a special problem in the laboratory. It will partake of the nature of original investigations. Hours arranged. *One to three credit hours.*

MR. BRAY, MR. CAULFIELD

65. PULP TECHNOLOGY.—A lecture course on the manufacture of the various kinds of wood pulps, and the chemical engineering involved in present-day pulp making. Prerequisites, Chemistry 1b, 2b, 31, and 40. Classroom, *two hours a week. Two credit hours.* MR. BRAY

66. PAPER TECHNOLOGY.—A lecture course on the processes of manufacturing paper. Prerequisite, Course 65. Classroom, *two hours a week. Two credit hours.* MR. BRAY

67. PULP MANUFACTURE.—Laboratory work. Unit-process work on semi-commercial scale production of various kinds of wood pulps, analysis of pulp-making raw materials, etc. Course 65 should be taken in conjunction. Prerequisites, Chemistry 1b, 2b, 31, and 40. Laboratory, *eight hours a week for first nine weeks.* One breakage card required. *Two credit hours.*

MR. BRAY, MR. CAULFIELD

68. PAPER MANUFACTURE.—A laboratory course, unit process work, in which papers of various kinds are made on semi-commercial equipment including Jordan and cylinder paper machines. Course 66 should be taken in conjunction. Laboratory, *eight hours a week for first nine weeks.* One breakage card required. *Two credit hours.* MR. BRAY, MR. CAULFIELD

82. PAPER COLORING.—A laboratory course involving an examination and application of the various classes of dyestuffs. Prerequisite, Course 85. Laboratory, *eight hours a week for first nine weeks.* One breakage card required. *Two credit hours.* MR. BRAY, MR. CAULFIELD

85. CELLULOSE.—A laboratory course dealing with the characteristics and derivatives of various kinds of pulps (cellulose). Prerequisites, Chemistry 1b, 2b, 31, 40 and Pulp and Paper 65. Laboratory, *four hours a week.* One breakage card required. *Two credit hours.* MR. CAULFIELD

86. BLEACHING OF PULP.—A laboratory course dealing with the methods of bleaching various kinds of pulp including use of bleaching powder, chlorine, electrolytic bleach production, and efficiency testing. Prerequisite, Course 65. Laboratory, *eight hours a week for last nine weeks.* One breakage card required. *Two credit hours.* MR. BRAY, MR. CAULFIELD

87. Paper Testing and Analysis.—A laboratory course involving physical, microscopical, and chemical testing of various kinds of papers. Prerequisites, Chemistry 31 and 40 and Pulp and Paper 65 and 66. Laboratory, *four hours a week*. One breakage card required. *Two credit hours.*

Mr. Bray, Mr. Caulfield

105. 106. Investigations and Thesis in Pulp and Paper Technology.

Mr. Bray, Mr. Caulfield

Equipment obtained and receipted for by a student and not returnable at the end of a course, as well as a few non-returnable supplies and a few special chemicals, will be charged to the student at cost. The supply room will be open during all laboratory periods. Breakage cards may be obtained only at the Treasurer's office and all students taking laboratory courses are required to have one. The unused balance is redeemable at the Treasurer's office, after obtaining clearance at the chemistry storeroom.

For Pulp and Paper Technology courses in the Summer Session, see the Summer Session Bulletin.

General Courses

Not sponsored by a single College or School.

TUTORIAL HONORS

The purpose of the Tutorial Honors course is to afford the superior student an opportunity to pursue, under exceptionally favorable conditions, some subject which is deemed important in the equipment of the symmetrically educated person, but for which he has not yet found a place in his course of study. It is not intended to provide instruction in a student's major subject, but to enable him to gratify his intellectual curiosity in some new field. As a rule, only juniors or seniors who have attained the standard of the Dean's List may be admitted, although inclusion in that list is not strictly prerequisite, nor will it serve automatically to admit the student to the course. The course is designed solely for the benefit of the student of ability, ideas, and self-reliance who can profit by the free manner of tutorial instruction and close contact with an adviser specially qualified to direct his study.

49. 50. Tutorial Honors.—The work is conducted by personal conferences and directed reading. The tutor is selected with the approval of the Committee on Tutorial Courses. Application for admission to the course should be made to Dean Chase. *Two credit hours.*

MILITARY SCIENCE AND TACTICS

Lieut. Colonel Alcott; Lieut. Colonel Haw; Major Phinney; Major Henkle; Captain Loupret; Sergeant Harabosky; Sergeant Rinkaus; Sergeant Roy

Military instruction is required by law. The department is in charge of an officer of the regular army, detailed by the President of the United States, as Professor of Military Science and Tactics. The course maintained is that of an Infantry and of a Coast Artillery Unit of the Reserve Officers' Training Corps the purpose of which is to train officers for infantry and coast artillery. The students are organized into infantry companies and coast artillery bat-

teries, including a band. The whole is organized into a battalion officered by cadets selected for character, soldierly bearing, and military efficiency. Instruction is carried on under rules and regulations prescribed by the Secretary of War in accordance with law.

Uniforms (except shoes and leather waist belts), arms, and equipment of the latest model of the U. S. Army are furnished by the Government.

Each student is required to have a pair of regulation shoes and, to insure uniformity, as well as reduce the cost to the minimum, he is required to secure these from the University. They are issued with the uniform, become the student's property, and the cost is deducted from his military deposit. These shoes are purchased directly from the manufacturers and are charged to the student at cost.

The uniform prescribed is as follows:

For cadet commissioned officers, the olive-drab service uniform prescribed for officers of the U. S. Army, except that "R.O.T.C." insignia are used; for other than commissioned officers, the olive-drab service uniform prescribed for the R.O.T.C. Basic Course.

Cadets are required to wear the uniform when on military duty.

In the following schedule of courses, numbers 1 to 4, inclusive, are required of all physically fit male freshmen and sophomores except students in the Two-Year Course in Agriculture. Course 5, 6 is elective for juniors and Course 7, 8 is elective for seniors. The required courses cover two years' instruction as laid down in War Department regulations. The elective courses also cover two years *and once entered upon* become a prerequisite for graduation. Having completed Courses 1 to 4, inclusive, students electing to continue their military training, who comply with the requirements of law and regulations, are entitled to money commutation of subsistence at a rate fixed by the Secretary of War.

Three per cent of the total number of students who on March 1 of each year are enrolled in the second year of the Advanced Course (Mt 7, 8), may be designated by the institution as honor graduates. The term "honor graduate" is understood to apply to a graduate whose attainments in scholarship have been so marked as to receive the approbation of the head of the University, and whose proficiency in military training and intelligent attention to duty have won the commendation of the professor of military science and tactics.

The general object of the courses of instruction of the Reserve Officers' Training Corps is to qualify students for positions of leadership in time of a national emergency and to better qualify them for their duties in civil life.

Basic Course, Infantry

Freshman Year, Course 1, 2. *Three hours a week, one and one-half credit hours a semester*

First Semester—National Defense Act and mission of R.O.T.C.; obligations of citizenship; military history and policy; military discipline, courtesy and customs of service; military sanitation and first aid; military organization (General); organization of infantry; leadership, including close and extended order drills, ceremonies, practice of fundamentals of leadership.

Second Semester—Map reading; the rifle and rifle marksmanship; leaderhip, covering same subjects as in first semester.

Sophomore Year, Course 3, 4. *Three hours a week, two credit hours a semester*

First Semester—Automatic rifle; musketry; characteristics of infantry weapons and those of the supporting arms; leadership (review and continuation of first year's training, stressing fundamentals of leadership).

Second Semester—Scouting and patrolling; combat principles of squad and section in attack defense and security; leadership (continuation of first semester's work).

Advanced Course, Infantry

Junior Year, Course 5, 6. *Five hours a week, two credit hours a semester*

First Semester—Aerial photograph reading; machine guns; howitzer company weapons; pistol; administration; leadership (principles of and instructional methods, with a thorough theoretical and practical review of basic training on this subject with a view to qualifying advanced students as instructors of basic students in close and extended order drill and ceremonies); care and operation of motor vehicles.

Second Semester—Review of rifle marksmanship; combat training (estimate of situation and combat orders; marches, security, development for combat, offensive and defensive combat, organization of the ground); combat principles of the rifle platoon, machine gun platoon and howitzer company squad; field fortifications; leadership (continuation of first semester's work); defense against Chemical Warfare.

Senior Year, Course 7, 8. *Five hours a week, two credit hours a semester*

First Semester—Military history and policy; military law I; military law II; leadership (principles of and instructional methods, being a review of first year advanced training from the point of view of the leader and instructor); review of offensive and defensive combat, organization of the ground, combat orders, solutions of problems; combat principles of the rifle company, machine gun company and howitzer company platoon in attack, defense, and security.

Second Semester—Combat principles (continuation of first semester); property, emergency procurement and funds; regulations of officers' reserve corps; leadership (continuation of work of first semester); tanks and mechanization; antiaircraft defense; antitank defense; infantry signal communications; combat intelligence.

Basic Course, Coast Artillery

Freshman Year, Course 1, 2. *Three hours a week, one and one-half credit hours a semester*

First Semester—Organization of the Army; organization of the Coast Artillery Corps; military discipline, courtesies and customs of the service; military sanitation and first aid; military history and policy; National Defense Act and R.O.T.C.; military obligations of citizenship; leadership, theory of close order drill to include the platoon; the practice of close order drill to include the company and ceremonies; rifle marksmanship.

Second Semester—Leadership (continuation of the theory and practice of close order drill to include the company and ceremonies); primary coast artillery instruction (coast artillery ammunition; weapons and material for seacoast artillery); map reading.

Sophomore Year, Course 3, 4. *Three hours a week, two credit hours a semester*

First Semester—Leadership (review and continuation of first year's training, adding thereto training in the fundamentals of leadership). Coast Artillery instruction (characteristics of naval targets; identification of aircraft; rigging; operation, and maintenance of Coast Artillery motor transportation; fire control and position finding for seacoast artillery).

Second Semester—Leadership (review and continuation of first semester work in leadership); coast artillery instruction (weapons and material for antiaircraft artillery; basic gunnery, fire control and position finding for antiaircraft artillery).

Advanced Course, Coast Artillery

Junior Year, Course 5, 6. *Five hours a week, two credit hours a semester*

First Semester—Leadership (review of basic training, primarily from the point of view of an instructor and leader). Administration; aerial photographic reading; defense against chemical warfare; fire control and position finding for seacoast artillery; applied gunnery for seacoast artillery; signal communications Coast Artillery; orientation.

Second Semester—Leadership (continuation of work of first semester in this subject). Basic and applied gunnery, fire control and position finding for antiaircraft artillery; rifle or pistol marksmanship.

Senior Year, Course 7, 8. *Five hours a week, two credit hours a semester*

First Semester—Leadership (to qualify students as instructors and platoon and battery commanders). Property, emergency procurement and funds; military law; military history and policy; mechanization; orientation; field fortifications for seacoast artillery.

Second Semester—Leadership (continuation of work of first semester in this subject). Combat orders and solution of problems (Coast Artillery); technique and elementary tactics for seacoast and for antiaircraft artillery; Officers Reserve Corps.

Band

Course 11, 12. *Three hours a week, one credit hour a semester*

The band consists of two classes of students: (1) those who register for band and receive one hour of academic credit; (2) those who do not register but who usually play with the band on public appearances, at military ceremonies, and on trips of the band as an undergraduate organization. Students who are registered for Band are required to practice two hours per week. For the equivalent of the third hour, they are required to attend such parades, ceremonies, and functions as designated by the Military Department and as requested by the Athletic Association.

Professor Sprague, Captain Loupret

PHYSICAL EDUCATION AND ATHLETICS

Men's Division

PROFESSOR WALLACE; PROFESSOR CURTIS; PROFESSOR BRICE;
PROFESSOR JENKINS; MR. KENYON; MR. WOODBURY

Athletics for men are under the supervision of the Athletic Board, composed of members of the faculty, alumni, trustees, and students. The management of athletics is in the hands of a faculty manager, who carries out the policies of the Athletic Board.

The schedules of all sports are arranged with the interest of both the University and the individual members of teams in mind. Letters and numerals are awarded by the Athletic Board to those men who earn them in competition in various sports. Admission to all home athletic contests is included in the blanket tax which is paid by each student at the time of registration.

Student managers are appointed in each sport and their work is carried on under the direction of the Faculty Manager. They are awarded a letter in their sport at the satisfactory completion of their duties.

Teams are maintained in varsity, junior varsity, and freshman football, varsity and freshman cross country, varsity relay, varsity and freshman indoor and outdoor track, varsity and freshman baseball, varsity winter sports, varsity and freshman tennis, and varsity and freshman basketball.

The organization of the Physical Education Department has been planned to give the student such experience and instruction as will enable him to establish habits of recreation which will serve to promote healthful physical activity while in college and in his life after graduation. Especial emphasis will be placed upon out-of-door recreational exercises during the fall and spring, while the gymnasium will be used to its full extent during the winter months.

The Intramural Athletic Association is a part of the Physical Education Department, and was organized for the purpose of fostering athletics for men who are not participating in varsity sports at the time and for all others at any time.

Competition is carried on by twenty-three teams in eleven different sports and it is hoped that it will be possible to increase this number in the near future.

It is the plan of the Department to furnish opportunity for everyone to participate in his favorite physical education activity.

1, 2. PHYSICAL EDUCATION.—Required of all freshmen. Outdoor supervised mass games; competitive athletics including football, boxing, wrestling, fencing, corrective exercises, elementary apparatus work, intramural sports, and indoor games. *Two hours a week, no credit.*

3, 4. PHYSICAL EDUCATION.—Required of all sophomores. Outdoor mass games and athletics including football, tag football, tennis, volley ball, playground ball, speedball, and winter sports. Indoor games include basketball, wrestling, boxing, fencing; corrective work and apparatus work will also be taught in the gymnasium. Credit is given for participation in intramural sports. *Two hours a week, no credit.*

Teachers' Course in Physical Education for Men

The following courses are for students who wish to teach physical education and who have completed Courses 1, 2 and 3, 4. The complete program is classed as a minor subject.

5. PHYSICAL EDUCATION.—The technique of teaching gymnastics. An outline of General Physical Education taking up specifically the meaning and results to be expected in modern physical education, first aid and massage, and the principles of training athletes and caring for athletic injuries. Practice teaching of games and mass athletics, supplemented by outside reading on physical education and hygiene. Methods of teaching football and basketball. *Five hours a week, two credit hours.*

6. PHYSICAL EDUCATION.—The study of games and play activity, covering plays and games from a physical education standpoint. Apparatus work, formal and school-room gymnastics, methods of promoting grammar and high-school programs in physical education and health. Methods of teaching track and baseball. *Five hours a week, two credit hours.*

7. PHYSICAL EDUCATION.—Health problems of school and community with emphasis on rural schools. A continuation of the technique of teaching mass games, corrective work, formal and informal gymnastics. Training and conditioning of athletes. Practice teaching. Methods of teaching football and basketball. *Five hours a week, two credit hours.*

8. PHYSICAL EDUCATION.—The administration of Physical Education programs in elementary and secondary schools. Graded apparatus work, training of leaders, corrective work individually and in classes. Practice teaching. Methods of teaching track and baseball. *Five hours a week, two credit hours.*

Women's Division

Associate Professor Lengyel; Assistant Professor Rogers;
Miss Cassidy

It is the purpose of this department to develop good physical condition among college women by providing opportunity for the formation of wholesome habits and for relaxation and recreation.

A medical examination by the University physician and a physical examination by the director of physical education are given each entering student during the first week of school, and thereafter as often as seems advisable. These are intended: to assist in the placement of the student with reference to her college program in the light of her physical ability and limitations; to inform the student as to her exact physical condition, so that she can intelligently conduct her mental and physical activity; and to discover as soon as possible any organic and physical defects in order to hasten their treatment.

Instructors in all activities are placing particular emphasis on two important aspects: the physical needs of the individual and the fun of the game. To stimulate a wholesome competitive interest on the part of the student, the Maine Athletic Association Women's Branch conducts a series of interclass activities in hockey, basketball, archery, tennis, and other sports.

Regulation gymnasium uniforms, described elsewhere in the catalog, are required for this work.

1, 2. Elementary Physical Education.—Required of all freshmen. Consists of postural and development gymnastics and physical efficiency tests of endurance, strength, and agility. Hockey, tennis, basketball, baseball, archery, and track may be substituted for this in season. *Two hours a week, no credit.*

1a, 2a. Modern Dance, Elementary.—May be substituted for Course 1, 2. Elements of the modern dance as introduced by Mary Wigman and Martha Graham. Appreciation of the dance is taught. Emphasis is placed upon mood, body control, and the development of imaginative powers. *Two hours a week, no credit.*

3, 4. Advanced Physical Education.—Required of all sophomores. A continuation of Course 1, 2, with advanced gymnastics and apparatus work, and more difficult physical efficiency tests. The sports listed above may be substituted for this in season, for the purpose of developing greater skill and accuracy, as well as providing recreation. *Two hours a week, no credit.*

3a, 4a. Modern Dance, Advanced.—Continuation of Course 1a, 2a with more advanced technique and dance form. May be substituted for Course 3, 4. *Two hours a week, no credit.*

5, 6. Tap Dancing.—Can be taken for Physical Education credit for one year only, either freshman or sophomore year.

Individual Gymnastics—Required of all freshmen and sophomores referred to the department by the medical examiner or by their family physician for special work. Prescribed exercises for body building, posture, foot work, etc. Students who are required to take this work substitute it for Courses 1, 2 and 3, 4. *Two hours a week, no credit.*

21. Hygiene.—A one-semester course, required of all freshman girls in the College of Arts and Sciences. It is designed to give a mature and scientific understanding of the principles of health and to create an interest in their application to one's self, and one's social relationships. Classroom, *two hours a week. Two credit hours.*

Members of the Departmental Staff and Others

Teachers' Certificate Courses in Physical Education for Women

The following courses are for students who wish to minor in Physical Education and thus obtain a Secondary State Teachers' Certificate from the State Department of Education.

Prerequisites: Physical Education 1, 2, 3, 4 without credit; General Zoology, *four credit hours;* Elementary Physiology and Hygiene, *two credit hours;* Human Physiology, *four credit hours.*

7. The Principles of Physical Education and Hygiene.—An introductory course in the interpretation and objectives of physical education. Open to juniors who are preparing to teach. *Three hours a week and field work, two credit hours.*

8. Physical Examination and Measurements.—This course covers the purposes, management, and technique of physical examination and first aid with the exception of the determination of organic capacity for activities. Open to juniors who have fulfilled the requirements of Zoology 1, 5, 12. *Three hours a week and field work, two credit hours.*

9. Methods for Teaching Physical Education.—This course deals with the methods of teaching physical education activities through the grades and high school. It also gives opportunity for practice teaching. Open to

seniors who have passed Courses 7 and 8. *Three hours a week and field work, two credit hours.*

12. First Aid.—Given biennially in the spring semester. This course includes the fundamentals prescribed by the American Red Cross in their First Aid Outline. Upon its completion the American Red Cross First Aid Certificate will be awarded. *Two credit hours.*

14. Girls' Basketball and High-School Athletics.—It takes up girls' athletics from the standpoint of girls' need of physical education. Specializes in athletics. Instruction in organized team games such as basketball, hockey, tennis, archery; recreational activities such as volley ball, badminton, deck tennis. Plan and diagram of plays, skeleton practice system and methods of training. *Three hours a week and field work, two credit hours.*

It is recommended that students enrolling in the above courses should have at least six hours of each of the following departments: Education, Psychology, Sociology, and Public Speaking.

Graduate Study

FACULTY OF GRADUATE STUDY

GEORGE DAVIS CHASE, Ph.D., LL.D., *Dean of Graduate Study and Professor of Classics*
LAMERT SEYMOUR CORBETT, M.S., *Professor of Animal Industry*
WILLIAM JORDAN SWEETSER, S.B., *Professor of Mechanical Engineering*
ROY MERLE PETERSON, Ph.D., *Secretary of the Faculty and Professor of Romance Languages*
ROBERT RUTHERFORD DRUMMOND, Ph.D., *Professor of German*
HARLEY RICHARD WILLARD, Ph.D., *Professor of Mathematics*
*JOHN H ASHWORTH, Ph.D., *Professor of Economics and Sociology*
CHARLES ANDREW BRAUTLECHT, Ph.D., *Professor of Chemistry and Chemical Engineering*
*MILTON ELLIS, Ph.D., *Professor of English*
EMBERT HIRAM SPRAGUE, B.S., *Professor of Sanitary Engineering*
†ALBERT LEWIS FITCH, Ph.D., *Professor of Physics*
DONALD FOLSOM, Ph.D., *Plant Pathologist, Experiment Station*
CHARLES HENRY MERCHANT, Ph.D., *Professor of Agricultural Economics and Farm Management*
JAMES HOWARD WARING, Ph.D., *Professor of Horticulture*
PAUL CLOKE, E.E., Eng.D., *Dean of the College of Technology*
OLIN SILAS LUTES, Ph.D., *Dean of the School of Education and Professor of Education*
CHARLES ALEXIUS DICKINSON, Ph.D., *Professor of Psychology*
PEARL STUART GREENE, A.M., *Professor of Home Economics*
FERDINAND HENRY STEINMETZ, Ph.D., *Professor of Botany and Entomology*
WILLIAM EDWARD BARROWS, E.E., *Professor of Electrical Engineering*
ARTHUR ST. JOHN HILL, E.E., M.S.E., *Professor of Electrical Engineering*
FRED GRIFFEE, Ph.D., *Biologist and Director of the Experiment Station*
‡RONALD BARTLETT LEVINSON, Ph.D., *Professor of Philosophy*
ELMER REEVE HITCHNER, Ph.D., *Professor of Bacteriology*
MARION DEYOE SWEETMAN, Ph.D., *Professor of Home Economics*

---

*On leave of absence, first semester, 1937-38.
†On leave of absence, 1937-38.
‡On leave of absence, second semester, 1937-38.

MAURICE DANIEL JONES, M.S., *Professor of Agricultural Economics and Farm Management*
PAUL DECOSTA BRAY, Ch.E., *Professor of Pulp and Paper Technology*
ARTHUR LOWELL DEERING, B.S., Sc.D., *Dean of the College of Agriculture*
WESTON SUMNER EVANS, M.S., *Professor of Civil Engineering*
JOSEPH MAGEE MURRAY, Ph.D., *Professor of Zoology*
JOHN ANTHONY CHUCKA, Ph.D., *Professor of Agronomy and Agricultural Engineering*
DWIGHT BURGESS DEMERITT, M.F., *Professor of Forestry*
LLEWELLYN MORSE DORSEY, M.S., *Professor of Dairy Husbandry*
HARRY WOODBURY SMITH, Ph.D., *Professor of Biological and Agricultural Chemistry*
AVA HARRIET CHADBOURNE, Ph.D., *Professor of Education*
GEORGE WILLIAM SMALL, Ph.D., *Professor of English*
ALBERT MORTON TURNER, Ph.D., *Professor of English and Comparative Literature*
EDWARD JONES ALLEN, Ph.D., *Dean of the College of Arts and Sciences*
WILBER ELMORE BRADT, Ph.D., *Professor of Chemistry*
CHARLES BURTON CROFUTT, Ph.D., *Associate Professor of Physics*
WILLIAM FRANKLIN DOVE, Ph.D., *Associate Biologist, Experiment Station*
EDWARD FRENCH DOW, Ph.D., *Associate Professor of History and Government*
WALTER JOSEPH CREAMER, E.E., *Associate Professor of Electrical Communication*
EVELYN FAYE WILSON, Ph.D., *Associate Professor of History and Government*
JOHN RAYMOND CRAWFORD, Ph.D., *Assistant Professor of Education*
CLARENCE EDWIN BENNETT, Ph.D., *Assistant Professor of Physics*
EDWARD NEWCOMB BRUSH, Ph.D., *Associate Professor of Psychology*
NOAH ROSENBERGER BRYAN, Ph.D., *Associate Professor of Mathematics*
HIMY BENJAMIN KIRSHEN, Ph.D., *Associate Professor of Economics and Sociology*
RISING LAKE MORROW, Ph.D., *Assistant Professor of History and Government*

ADMINISTRATION

Graduate work is administered by the Faculty and Dean of Graduate Study. The details of administration are in the hands of an executive committee consisting of the Dean, one member from the Experiment Station, two from each of the three colleges—Agriculture, Arts and Sciences, and Technology,—and two from the School of Education.

ADMISSION

Students who hold a bachelor's degree from the University of Maine, or from an institution granting a fully equivalent degree, and who desire to pursue advanced studies, are admitted as graduate students and are under the direction of the faculty of graduate study, whether they are candidates for a degree or not.

REGISTRATION

At the beginning of each semester all graduate students, whether candidates for a degree or not, are required to register with the head of the department in which they propose to do their major work, obtain the approval of the Dean, and complete their registration by filing their program of study at the Registrar's office. A fee of two dollars is charged for registration after two weeks have elapsed.

TUITION AND FEES

The tuition charges for graduate students are the same as for undergraduates.

Candidates for professional degrees are required to pay a fee of $5.00 at the time of registration, and a fee of $10.00 upon the presentation of the thesis.

FELLOWSHIPS AND SCHOLARSHIPS

Applications for graduate fellowships and scholarships should be made to the Dean of Graduate Study by May 1, except that for the Trustee Scholarship in Technology they should be made not later than April 1.

Trustee Fellowships.—The Trustees of the University established in 1931 three graduate fellowships of the value of $500.00 each, to be assigned annually on a competitive basis by a committee of the Faculty of Graduate Study.

Trustee Graduate Scholarships.—Eight scholarships, of the value of a year's tuition, have been established by the Board of Trustees, two each for graduates of the three colleges in the University and the School of Education. Holders of these scholarships may be called upon to render a reasonable amount of assistance in their major department.

MARITIME PROVINCES GRADUATE SCHOLARSHIPS.—By action of the Trustees of the University, a graduate scholarship is available annually in each of the four academic divisions of the University, on a competitive basis, for graduates of the colleges and universities in the Provinces of New Brunswick, Nova Scotia, and Prince Edward's Island. These scholarships have a value of $250.00, equivalent to a full year's tuition for a student residing without the State. The first award was made in 1934, to a graduate of Acadia University.

THE COE RESEARCH FUND

The Trustees of the University have set aside the sum of $100,000 to form a permanent fund, the proceeds of which are to be used for carrying on various kinds of research work within the University. Applications for grants from this fund should be addressed to Professor E. R. Hitchner, Secretary. It is hoped that this fund may later be increased by grants from other sources.

DEGREES

The degrees of Master of Arts, Master of Science, Master of Arts in Education, and Master of Science in Education are granted to candidates who hold corresponding bachelor's degrees and fulfill the requirements of residence and scholarship.

A candidate for an advanced degree must give evidence by his previous record that he is qualified to do graduate work of a satisfactory grade. If he is a graduate of another institution he is required to submit, with his plan of study, credentials covering the courses pursued and the standing attained. If he is a graduate of the University of Maine he must present his record from the Registrar's office.

REQUIREMENTS FOR THE MASTER'S DEGREE

A candidate for the master's degree is required to devote at least one year to resident graduate study and to complete work amounting to fifteen hours per week throughout the college year (thirty semester hours). In the case of summer session students, four sessions, or the equivalent, are normally accepted as equivalent to a year of residence.

At least one year must elapse between the conferring of the bachelor's and the master's degree. No work done before the recommending for the bachelor's degree shall be counted toward the master's degree. All requirements for the degree must be completed within an eight-year period.

As soon after registration as practicable, the student, in conference with his major instructor, will plan his entire course of study for the master's degree. The major instructor will present the proposed curriculum for approval to a committee, which consists of the Dean of Graduate Study and the representatives of the candidate's college on the Executive Committee of the faculty.

The curriculum shall include work in a major department or subject in which the candidate has already completed the equivalent of at least two years of undergraduate study. The work may all be done in one department, or it may include not more than two minor subjects which bear a distinct relation to the general plan or purpose of the major subject. All of the work must be of advanced character and must be tested by examinations which the candidate shall pass with distinction.

Courses of study intended primarily for graduate work are numbered above 100 in the catalog, but courses numbered 51 to 100 inclusive may be counted upon approval. Courses numbered 50 or under may not be accepted for graduate credit.

Each candidate for a degree is furnished with a registration book containing the names and numbers of the courses which have been approved for his degree, and spaces for entering the date of beginning and completing each course, to be filled in by the instructor. This book is the student's official record of his course and should be carefully preserved and presented at the time of his final examination.

The candidate shall prepare, as a part of his curriculum, a satisfactory thesis on some topic connected with his major subject. It is ordinarily expected that the thesis shall be a limited piece of original research, with the design of making a minor contribution to scholarship in the student's particular field. A student of proved maturity, intelligence, accuracy, and industry, however, whose objectives and interests are not best furthered by this type of research, may be authorized to submit a thesis of different type. This may consist of a digest and analysis of the literature on a topic or problem of major importance in the student's field; the analysis of a set of accepted statistics in that field; a comprehensive outline and critique of current practices; or a report of a project undertaken and carried on under competent direction. The subject must be submitted by the end of the first semester of study.

The thesis must be deposited in completed form with the Dean of Graduate Study before the final examination. It must have been previously approved

by a committee composed of his major instructor, the head of the major department, and the members of the Executive Committee from the candidate's college.

At the end of the course of study for the master's degree, after his thesis has been approved, the candidate will be required to pass an oral examination covering his work, including the thesis. The time for such examination will be arranged by the Dean to accord, so far as possible, with the convenience of the candidate and the major instructor; they will ordinarily be held in the month of May, but, at the discretion of the Executive Committee, may be held at other times. About May 15, the Dean will notify the heads of all departments of the University of the dates set for the public oral examinations of the candidates of the year. Examinations are open to all voting members of the faculty. While, as a matter of course, the examination will be conducted chiefly by the members of the departments in which the work has been done, any member of the faculty present at the examination has the privilege of questioning the candidate.

Graduates are required to receive their degree in person at Commencement unless especially excused by the President.

Further information about the administration of graduate work and detailed requirements for the form and arrangement of theses may be found in a pamphlet entitled "Degrees and Theses."

PROFESSIONAL DEGREES

The professional degrees of Chemical Engineer (Ch.E.), Civil Engineer (C.E.), Electrical Engineer (E.E.), and Mechanical Engineer (M.E.) may be conferred upon graduates in the curricula of Chemistry, Chemical Engineering, or Pulp and Paper Technology, Civil Engineering, Electrical Engineering, and Mechanical Engineering, respectively, upon the completion of the requirements stated below. Graduates receiving the degree of Bachelor of Science in General Engineering are eligible to receive, upon the completion of the requirements listed below, the professional degree of Chemical Engineer, Civil Engineer, Electrical Engineer, or Mechanical Engineer, depending upon the field of work of the candidate and the judgment of the dean and the heads of departments in the College of Technology.

The presentation of a satisfactory thesis, which shall constitute an original contribution to the advance of engineering, is required of all candidates. The candidate must hold a position of responsibility and must have accomplished professional work of eminence for a period of at least five years subsequent to graduation. A full and complete statement covering the professional experience of the candidate must be presented at the time of registration. Candidates are expected to be present in person to receive their degrees.

UNIVERSITY OF MAINE STUDIES

The *University of Maine Studies,* Second Series, are issued under the direction of the Faculty of Graduate Study, for the purpose of publishing notable pieces of research work produced by graduate students and members of the faculty.

Copies of the *Studies* and lists of subjects may be obtained from the University Library.

Maine Agricultural Experiment Station

GOVERNMENT OF THE STATION

By authority of the Trustees the affairs of the Station are considered by the Station Council, composed of the President of the University, three members of the Board of Trustees, the Director of the Station, the heads and associates of the various departments of the Station, the Dean of the College of Agriculture, the Director of the Extension Service, the Commissioner of Agriculture, and one member each from the State Pomological Society, the State Grange, the State Dairymen's Association, the Maine Livestock Breeders' Association, and the Maine Poultry Improvement Association. The recommendations of the Council are referred to the Trustees for final action. The Director is the executive officer of the Station and the other members of the staff carry out the lines of research that naturally come under their departments.

OBJECT

The purpose of the agricultural experiment stations is defined in Acts of Congress establishing them and providing further funds for their support as follows:

"It shall be the object and duty of said experiment stations to conduct original researches or verify experiments—bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States and Territories," and "including such scientific researches as have for their purpose the establishment and maintenance of a permanent and efficient agricultural industry, and such economic and sociological investigations as have for their purpose the development and improvement of the rural home and rural life."

INCOME

The income of the Station is derived from the following sources: Federal and State appropriations, payments for inspection analyses made for the

Commissioner of Agriculture, and from the sale of farm produce. Through appropriations to the University the State provides for the cost of printing Station publications.

EQUIPMENT

Most of the Station offices and laboratories are in Holmes Hall, described in the section on University buildings. The station is well equipped in labortaries and apparatus, particularly in the lines of biological, chemical, entomological, horticultural, pomological, plant pathological, and poultry investigations. It has extensive collections illustrating the botany and entomology of the State. It has a library of nearly 7000 volumes comprising agricultural and biological journals and publications of the various experiment stations.

HIGHMOOR FARM

The State Legislature of 1909 purchased a farm upon which the Maine Agricultural Experiment Station "shall conduct scientific investigations in orcharding, corn, and other farm crops." The farm is situated in the counties of Kennebec and Androscoggin, largely in the town of Monmouth. It is on the Farmington branch of the Maine Central Railroad, two miles from Leeds Junction. A flag station, "Highmoor," is on the farm.

The original farm contains 225 acres, about 200 of which are in orchards, fields, and pastures. The Legislature in 1925 provided an appropriation for the purchase of 30 acres adjoining the farm for a demonstration orchard. There are in the neighborhood of 2500 apple trees upon the place. Fields that are not in orchards are well adapted to experiments with corn, potatoes, and similar farm crops. The house is well arranged for the station offices and for the home of the farm superintendent. The barns are large, affording storage for hay and grain. A cold storage plant has been provided for apples. The capacity of this plant is about 7500 boxes.

AROOSTOOK FARM

By action of the Legislatures of 1913 and 1915 a farm was purchased in Aroostook County for scientific investigations in agriculture to be under "the general supervision, management, and control" of the Maine Agricultural Experiment Station. The farm is in the town of Presque Isle, about two

miles south of the village, on one of the main roads to Houlton. The Bangor and Aroostook Railroad crosses the farm.

The farm contains about 275 acres, somewhat more than half of which is cleared. The eight-room house provides an office and a home for the farm superintendent. The large barn affords storage for hay and grain and has a potato storage house in the basement.

INVESTIGATIONS

The Station continues to restrict its work to a few important lines, believing that it is better for the agriculture of the State to study thoroughly a few problems than to spread over the whole field of agricultural science. It has continued to improve its facilities and segregate its work in such a way as to make it an effective agency for research in agriculture. Prominent among the lines of investigation are studies upon the food of man and animals, the diseases of plants and animals, breeding of plants and animals, investigations in animal husbandry, orchard and field experiments, poultry investigations, entomological, agricultural, and home economics research.

INSPECTIONS

The Commissioner of Agriculture is the executive of the laws regulating the sale of agricultural seeds, commercial feeding stuffs, commercial fertilizers, dairy products, drugs, foods, fungicides and insecticides. The law requires the commissioner to collect samples and have them analyzed at the Station. The law also requires the Station to make the analyses and publish the results.

PUBLICATIONS

The Station issues three series of publications: Bulletins, Official Inspections, and Miscellaneous Publications.

The results of the work of investigation are published in part in scientific journals at home and abroad, in U. S. Department of Agriculture publications, and in bulletins of the Station. All of the more important and immediately practical studies are published in the Station Bulletins. The Bulletins for a year together make up the Annual Report. Bulletins are sent to the press of the State, to exchanges, libraries, and scientific workers. Bulle-

tins which contain matter of immediate value to practical agriculture are sent free to residents of Maine whose names are on the permanent mailing list.

The results of the work of inspection are printed in pamphlet form and are termed Official Inspections. Official Inspections are sent to dealers within the State; those that have to do with fertilizers, feeding stuffs, and seeds are sent to farmers; and those reporting foods and drugs are sent to a list of several thousand women within the State.

The Miscellaneous Publications consist of newspaper bulletins, circulars, and similar fleeting publications. These are sent to different addresses according to the nature of the subject matter.

On request, the name of any resident of Maine will be placed on the permanent mailing list to receive notices of the Bulletins and Official Inspections as they are published. Upon request, any of the Bulletins or Official Inspections will be mailed free of charge to residents of Maine.

Summer Session

The Summer Session begins the first week in July and continues for six weeks. The faculty is made up mainly of members of the University staff of professorial rank and visiting professors from other institutions. Over one hundred courses in nineteen departments are now offered. Instruction is given in most of the subjects taught in the College of Arts and Sciences as well as in Chemistry, Pulp and Paper Technology, Physical Education, Home Economics, and Nursing Education. A large amount of work is available in Education.

As an integral part of the University organization, the Summer Session insists upon similar standards of academic achievement. In general the same requirements for admission and the same regulations apply as during the regular academic year.

The Session is primarily for the benefit of teachers and superintendents of Maine and other states who desire to take professional courses in the field of Education or to pursue other subjects which may be helpful to them in connection with their work. Hence special attention is given to teachers' courses in the various subjects offered. The Session also affords opportunities for students in the University of Maine or other similar institutions to secure credits toward a degree and complete their work in a shorter time than would otherwise be possible. Normal-school graduates who are admitted to advanced standing as candidates for a bachelor's degree in the School of Education may do a considerable part of their work in the Summer Session.

Properly qualified graduates of colleges or universities may enroll in most departments as candidates for a master's degree and complete their work by attendance at the Summer Session. The minimum residence requirement in such cases is four sessions. An increasing number of summer students are candidates for an advanced degree.

Classes meet five times a week, Monday to Friday inclusive. Except in special cases the maximum registration is for three courses, the successful completion of which entitles the student to six semester hours of credit.

A registration fee of $5.00 is paid by all students. Tuition for a single two-credit course is $15.00; for each additional two-credit course, $10.00. In some courses involving laboratory work a special fee is charged.

The opening and closing dates for 1938 are Tuesday, July 5, and Friday, August 12. The Summer Session Bulletin, giving a list of the courses offered and detailed information, is published annually about March 1. For copies and other information address Dr. Roy M. Peterson, Director, Orono, Maine.

Extension Courses

The University offers a limited amount of work each year through extension courses given by various departments. These courses are handled by the office of the School of Education. Courses are offered by departments in all the colleges of the University according to the demand for such work. The list is revised and distributed in mimeographed form each year in September.

Two general types of courses are offered as follows: (1) Correspondence courses, which are handled entirely by mail on an individual basis; (2) extension classes, which may be organized in any community where sufficient demand exists, provided an instructor is available for the course desired.

College credit toward a degree may be earned by both types of extension courses, subject to the regulations of the department and college in which the student is registered, the approval of which should always be secured in advance if such credit is desired.

Alumni Associations

GENERAL ASSOCIATION

President, Fred D. Knight '09, 39 Boylston St., Boston, Mass.
Vice president, George D. Bearce '11, Bucksport
Clerk, Maurice D. Jones '12, Orono
Treasurer, Paul D. Bray '14, Orono
Executive Secretary, Charles E. Crossland '17, Orono
Assistant Secretary, Philip J. Brockway '31, Orono

ALUMNI COUNCIL

Members at Large

	Term expires
Mrs. Hamlyn N. Robbins 19, R.F.D. #1, Scarboro	1938
Mrs. Merrill Bowles '21, 176 Nowell Rd., Bangor	1938
Richard E. McKown '17, Bar Harbor	1938
Arthur L. Deering '12, Orono	1938
Harold Cooper '15, 77 Davis Ave., Auburn	1938
C. Parker Crowell '98, 6 State St., Bangor	1939
Mrs. William F. Schoppe '08, R.F.D. #2A, Auburn	1939
Harry E. Sutton '09, P. O. Box 1100, Boston, Mass.	1939
F. Drummond Freese '15, 144 Broadway, Bangor	1939
Andrew J. Beck '13, Washburn	1939
Raymond H. Fogler '15, Montgomery Ward & Co., Chicago, Ill.	1940
Norman H. Mayo '09, 485 Plainfield St., Providence, R. I.	1940
George S. Williams '05, 9 Green Street, Augusta	1940

College of Agriculture

Frank W. Hussey '25, Presque Isle	1938

College of Arts and Sciences

Hazen A. Ayer '24, 10 Post Office Sq., Boston	1939

College of Technology

Walter H. Burke '06, 2 Rector St., New York City 1938

College of Law

Robert W. DeWolfe '07, 102 Exchange St., Portland 1940

Alumni Representative on Board of Trustees

Harold M. Pierce '19, P.O. Box 58, Bangor 1940

LOCAL ASSOCIATION OFFICERS

MAINE

Androscoggin Alumnae—President, Mrs. William F. Schoppe '08, R.F.D. #2A, Auburn.

Androscoggin Alumni—President, Frank Powers '11, 138 Lisbon St., Lewiston; Secretary, Paul W. Bean '35, 145 Davis Ave., Auburn.

Central Maine—President, W. E. Parsons '11, Keyes Fibre Co., Waterville; Secretary, Miss Fern Allen '34, 40 Pleasant St., Waterville.

Cumberland County—President, Elmer R. Higgins '30, 8 Preble St., Portland; Secretary, Raymond E. Marsh '31, 19 Rudman Rd., Portland.

Franklin County—President, Harry C. Riddle '07, Rangeley; Secretary, Miss Elizabeth Tryon '33, Farmington.

Hancock County—President, George D. Bearce '11, Bucksport; Secretary, Gardner Tibbetts '22, Ellsworth.

Knox County—President, John R. Durrell '27, 15 Summer St., Rockland; Secretary, Mrs. Helen Wentworth '20, Hope.

Lincoln County—President, Harvey R. Pease '14L, Wiscasset; Secretary, Miss Selma Gregory '34, Boothbay Harbor.

Northern Aroostook—President, Grover Hardison '08, Caribou; Secretary, Thomas Houghton, Jr. '37, R.F.D. #1, Fort Fairfield.

Oxford County—President, Harry M. Shaw '15, 173 Main St., Norway; Secretary, Miss Arline Anderson '35, 10 Danforth St., Norway.

Penobscot County—President, James G. Wallace '06, 73 Broadway, Bangor; Secretary, Stanley R. Prout '33, 54 Forest Ave., Bangor.

Piscataquis County—President, Frederick R. Bigney '10, Greenville; Secretary, Mrs. Harland A. Ladd '25, Milo.

Portland Alumnae—President, Miss Dorothy Findlay '33, 28 Sheffield St., Portland; Secretary, Miss Christine Elliott '35, 46 Columbia Rd., Portland.

Sagadahoc County (Merrymeeting Bay)—President, L. Everett Curtis, Jr. '23, 15 Berry St., Brunswick; Secretary, Howard C. Bates '33, 691 Washington St., Bath.

Somerset County—President, Elmer Baird '16, R.F.D. #2, Pittsfield; Secretary, Mrs. George A. Moore '22, 21 Libby St., Pittsfield.

Southern Aroostook—President, Charles Wood '22, Houlton; Secretary, Alice R. Lincoln '29, Houlton.

Southern Kennebec—President, George H. McGouldrick '23, 4½ W. Crescent St., Augusta; Secretary, Ralph G. Kennison '22, 9 Pike St., Augusta.

Waldo County—President, Philip Parsons '34, Belfast; Secretary, Miss Clara Sawyer '28, E. S. N. S., Castine.

Washington County—President, Horace Bell '28, Box 142, Machias; Secretary, Ernest K. Gatcomb '31, East Machias.

York County—President, Joseph E. Harvey '16, 113 Main St., Biddeford; Secretary, Raymond H. Lovejoy '18, Sanford.

CALIFORNIA

Southern California—President, George E. Springer '10, 1128 West 50th St., Los Angeles; Secretary, Ezekial L. Chase '26, 957 No. Ridgewood Place, Hollywood.

CONNECTICUT

Connecticut—President, Ronald Young '32, 236 Sigourney St., Hartford; Secretary, James D. Crocker '35, 301 Washington St., Hartford.

DISTRICT OF COLUMBIA

District of Columbia—President, Henry J. Hill, Jr. '22, 1635 Montague St., N. W., Washington; Secretary, Miss Mildred H. Merrill '13, 1673 Columbia Rd., N. W., Washington.

ILLINOIS

Chicago—President, William T. Osgood '09, 1400 Lake Shore Drive, Chicago; Secretary, Ralph L. Seabury '05, P.O. Box 805, Anderson, Indiana.

MARYLAND

Baltimore—President, Omar F. Tarr '16, 907 Old Oak Rd., Baltimore; Secretary, Clarence B. Springer '18, 3506 Dennlyn Rd., Baltimore.

MASSACHUSETTS

Boston Alumnae—President, Miss Cora Emery '26, 41 Wendell St., Cambridge; Secretary, Miss Elizabeth Livingstone '31, 8 Sanborn St., Winchester.

Boston Alumni—President, Benjamin M. Cowan '05, 49 Federal St., Boston; Secretary, Malcolm H. Oak '15, 5 Lockeland Ave., Arlington.

Western Massachusetts—President, Richard Thompson '29, 41 Santa Barbara St., Springfield; Secretary, Paul Langlois '34, 2 Main St., Agawam.

Worcester County—President, George Hansen '17, 98 Heard St., Worcester; Secretary, Dr. James E. Masterson '16, 1241 Main St., Worcester.

MICHIGAN

Detroit—President, Walter M. Chase '10, 1254 Bishop Road, Grosse Point Park, Detroit; Secretary, Richard Moore '34, 7501 West Jefferson, Detroit.

MINNESOTA

Northwestern—Secretary, James H. Davidson '21, 1100 Builders Exchange, Minneapolis.

MISSOURI

Missouri—President, Vernon H. Wallingford '19, 400 Royal Ave., Ferguson; Secretary, Mrs. Vernon H. Wallingford '19, 400 Royal Ave., Ferguson.

NEW HAMPSHIRE

Southern—President, William Redman '15, Box 83, Candia; Secretary, Webster White '24, Hudson.

White Mountain—President, Daniel W. MacLean '09, Senior High School, Berlin; Secretary, Robert Rich '18, 173 Main St., Berlin.

NEW YORK AND NEW JERSEY

Central New York—President, Joseph O. Whitcomb '00, 618 Ostrom Ave., Syracuse; Secretary, Mrs. Vernon Bryant '28, 274 Woodbine Ave., Syracuse.

New York Alumnae—President, Mrs. Emilie K. Josselyn '21, 272 So. Broadway, Yonkers; Secretary, Miss Sarah Thompson '29, 133 Glen Ave., Mt. Vernon.

New York Alumni—President, Lawrence W. Davee '22, 153 Westervelt Ave., Tenafly, N. J.; Secretary, Clarence E. Bassett '29, 2825 Grand Concourse, New York City.

Northeastern New York—President, Milton F. Kent '30, R.F.D. #7, Scotia; Secretary, Winslow L. Jones '30, 916 McClellan Ave., Schenectady.

Western New York—President, Maxwell K. Murphy '30, Apt. 4, 252 Delaware Rd., Kenmore.

OHIO

Ohio—President, Allen M. Knowles '04, 3166 Washington Blvd., Cleveland Heights.

PENNSYLVANIA

Lehigh Valley—President, Everett P. Welch '22, 2223 Fairview St., Allentown; Secretary, Harold T. Pierce '29, 1146 Turner St., Allentown.

Philadelphia—President, Robert G. Cornforth '20, 1019 Allengrove St., Philadelphia; Secretary, Albert D. Case '04, 105 Grayling Ave., Narberth.

Pittsburgh—President, Dr. Kenneth Field '25, Carnegie Institute, Pittsburgh; Secretary, John D. Babb '26, 423 Olympia Rd., Mt. Washington, Pittsburgh.

RHODE ISLAND

Providence—President, Carl F. Brugge '18, 30 Bayley St., Pawtucket; Secretary, Earle L. Ferren '20, 707 Turks Head Bldg., Providence.

VERMONT

Vermont—President, Carl Hopkins '15, 94 Main St., Montpelier; Secretary, Mrs. Stanley Hyde '25, Ludlow.

SPECIAL ASSOCIATIONS

THE UNIVERSITY OF MAINE TEACHERS' ALUMNI ASSOCIATION—President, Harold H. Inman '31, Houlton; Vice president, Leroy Huckins '22, Winthrop; Secretary, Charles E. Crossland '17, Orono; Treasurer, K. Jean Keirstead '31, 20 Oak St., Old Town.

PULP AND PAPER—Chairman, George D. Bearce '11, Maine Seaboard Paper Co., Bucksport.

CLASS SECRETARIES

1872—
1873—F. Lamson-Scribner, 1849 California St., N.W., Washington, D. C.
1874—
1875—
1876—E. M. Blanding, 46 Madison St., Bangor.
1877—Edward F. Danforth, Skowhegan
1878—C. C. Chamberlain, 113 Railroad St., Enderlin, N. D.
1879—C. A. Morse, Windermere Hotel West, Chicago, Ill.
1880—Charles W. Fernald, South Levant
1881—H. M. Plaisted, 4413 Page Blvd., St. Louis, Mo.
1882—W. R. Howard, 11 Church St., Belfast

1883—Miss Janie Michaels, Stillwater
1884—Leslie W. Cutter, 65 State St., Bangor
1885—James N. Hart, 123 Main St., Orono (also sec. Senior Alumni)
1886—S. S. Twombley, R.F.D. #1, Box 40, Fullerton, Calif.
1887—John S. Williams, Guilford
1888—Thomas G. Lord, 11 Bridge St., Skowhegan
1889—Dr. J. S. Ferguson, 1 Malba Drive, Malba, L. I., New York City
1890—George P. Gould, 9 Poplar St., Bangor
1891—W. M. Bailey, 88 Broad St., Boston, Mass.
1892—W. R. Butterfield, 14 Paulina St., Somerville, Mass.
1893—Harry Smith, 51 Hammond St., Bangor
1894—W. H. Jose, 40 Bemis St., Newtonville, Mass.
1895—Dr. H. S. Boardman, 172 Main St., Orono
1896—P. B. Palmer, 32 Myrtle St., Orono
1897—W. L. Holyoke, 1422 Watauga St., Kingsport, Tenn.
1898—C. Parker Crowell, 6 State St., Bangor
1899—Allen W. Stephens, Room 3402, 10 E. 40th St., New York City
1900—Henry F. Drummond, 91 West Broadway, Bangor
1901—
1902—Arthur E. Silver, Ebasco Services Inc., 2 Rector St., New York City
1903—E. G. Hartford, 11 Bothwell Rd., Brighton, Mass.
1904—Leslie E. Little, 73 Court St., Augusta
1905—J. Harvey McClure, 49 Hammond St., Bangor
1906—Ralph Lord, 70 Exchange St., Bangor
1907—C. H. Lekberg, 492 Main St., Worcester, Mass.
1908—James A. Gannett, 166 Main St., Orono
1909—Harold A. Rich, 78 Adella Ave., West Newton, Mass.
1910—Grover T. Corning, 30 Federal St., Boston, Mass.
1911—Avery C. Hammond, 61 Main St., Bangor
1912—William E. Schrumpf, 6 University Place, Orono
1913—James E. Church, 192 Northern Ave., Gardiner
1914—F. S. Youngs, 225 Center St., Bangor
1915—Robert Thurrell, East Wolfeboro, N. H.
1916—W. W. Webber, Bucksport
1917—Frank O. Stephens, 21 Academy St., Auburn
1918—Walter J. Creamer, 331 Center St., Bangor
1919—Harold M. Pierce, Box 58, Bangor
1920—Walter W. Chadbourne, 59 College Rd., Orono
1921—Miss Katherine Stewart, 21 Ohio St., Bangor
1922—Ulmer Davis, 61 Main St., Bangor
1923—Miss Elizabeth Ring, University of Maine, Orono

1924—J. Wesley Ames, Slatersville Inn, Slatersville, R. I.
1925—Mrs. William Schrumpf, 6 University Place, Orono
1926—Miss Cora E. Emery, 41 Wendell St., Cambridge, Mass.
1927—Mrs. Crystal H. Dostie, 47 Mt. Pleasant St., Skowhegan
1928—Mrs. Barbara P. Skofield, 52 Harlow St., Brewer
1929—Mrs. Mary R. McClure, 69 Highland Ave., Bangor
1930—Mrs. Pauline Leech, Homer Folks Hospital, Oneonta, N. Y.
1931—Mrs. Mary C. Stiles, 110 Revere St., Portland
1932—Mrs. Helen S. Hincks, Section 1, Apt. 25, 349B Pleasant St., Malden, Mass.
1933—Mrs. Martha S. Baldwin, 275 Broadway, Norwich, Conn.
1934—Miss Madelene Bunker, Maxwell House, 139 Ft. Washington Ave., New York City
1935—Miss Agnes Crowley, 59 Western Ave., Biddeford
1936—Mrs. Phyllis H. Webster, 62 Gillander Ave., Auburn
1937—Mrs. Elizabeth S. Hoyt, 29 Maple Ave., Farmington

Honors and Prizes Awarded

Members of Honor Societies arranged in order of establishment

Members of Phi Beta Kappa

1937

Paul Webber Burke, Bangor; Faith Gertrude Folger, Fryeburg; Walter Irving Green, Bradford, Mass.; George Philip Hitchings, Orono; Flora Hermion Lutz, Old Town; Marjorie MacKinnon, Topsham; Josephine Weick Snare, Hampden Highlands; Alice Rose Stewart, Brunswick; Ralph Eugene Wentworth, Bangor.

1938

Francis Wilson Bradbury, Brewer; Mildred Mae Dixon, South Eliot.

Members of Tau Beta Pi

1937

Wendell Merton Bagley, Troy; Richard Nathaniel Berry, Malden, Mass.; Philip Nichols Bower, Auburn; Everett Leighton Brewer, Portland; Woodford Bradbury Brown, Bangor; Robert Anderson Cabeen, Provincetown, Mass.; William Eleazor Crowell, South Portland; Alan Dallas Duff, Jr., Augusta; Cranston Wesley Folley, South Portland; Paul Winthrop Morgan, Thomaston; Russell Lermond Morgan, Thomaston; Shirley Robinson Parsons, South Paris; Richard Alonzo Pfuntner, Guilford; Richard Marcus Spear, Thomaston; John Clark Stinchfield, Wayne; Gerald Earle Stoughton, Orono; George Seth Williams, Jr., Gardiner.

1938

Ernest Eugene Adams, South Brewer; Nelson Bradford Carter, Brewer; James Robert DeCoster, South Portland; Howard Mayo Goodwin, Brewer; Joseph Henry Lewis, Springfield; Dwight Elmer Lord, Camden; George Edwin Philbrook, Tenafly, N. J.; Richard Watt Raymond, St. Albans, Vt.; Sherman Vannah, Waldoboro.

Members of Alpha Zeta

1937

Robert Vinton Akeley, Presque Isle; Edwin Hill Bates, Bath; Richard Wilbur Briggs, Canton; Gayland Earle Folley, South Portland; George Robert Grange, Smyrna Mills; Leslie Morton Hutchings, Portland; Robert Elwin McKusick, Guilford; Gustavus Abbott McLaughlin, Dyer Brook; Avery Edmund Rich, Charleston; Sargent Russell, North Leeds; Lester Hurlin Smith, Buxton.

1938

Ronald Eugene Barnes, Fort Fairfield; Arthur Leroy Crouse, Crouseville; George Turner Fowler, Fort Fairfield; Richard Woodman Gerry, Lewiston; Earle Edwin Gray, Anson; Waldo Flanders Hardison, Caribou; Francis Clough Jones, Orono; Arland Ritchie Meade, Auburn; Norman Renfrew Ness, Auburn; John Wesley Oliver, Orono; Albert Llewellyn Owens, Portland; Thomas William Owens, Jr., Portland.

1939

Thomas Levi Barker, Vassalboro; Dana Edgecomb Drew, Patten; Walton Earle Grundy, Auburn; Herbert Arthur Leonard, Thorndike.

Members of Phi Kappa Phi

1937

Wendell Merton Bagley, Troy; Philip Nichols Bower, Auburn; Everett Leighton Brewer, Portland; Woodford Bradbury Brown, Bangor; Paul Webber Burke, Bangor; William Eleazor Crowell, South Portland; Faith Gertrude Folger, Fryeburg; Cranston Wesley Folley, South Portland; Walter Irving Green, Bradford, Mass.; John Emerson Hart, Orono; George Philip Hitchings, Orono; Leslie Morton Hutchings, Portland; Flora Hermion Lutz, Old Town; Marjorie MacKinnon, Topsham; Robert Elwin McKusick, Guilford; Gustavus Abbott McLaughlin, Dyer Brook; Paul Winthrop Morgan, Thomaston; Robert Loring Ohler, Newton Centre, Mass.; Shirley Robinson Parsons, South Paris; Richard Alonzo Pfuntner, Guilford; Lucinda Ewer Rich, Charleston; Sargent Russell, North Leeds; Martha Simmons, Sargentville; Josephine Weick Snare, Hampden Highlands; Richard Marcus Spear, Thomaston; Alice Rose Stewart, Brunswick; Gerald Earle Stoughton, Orono; Ralph Eugene Wentworth, Bangor.

Members of Kappa Delta Pi

1937

Barbara Colby, South Paris; Julia Bridget Cox, Freeport; Raymond Ellsworth Morton, Gorham; Martha Simmons, Sargentville; Arthur Alton Webb, Brooks.

1938

Helen Derry Abbott, Portland; Minnie Estelle Brown, Waterville; Madeleine Crawford Davis, Biddeford; Natalie Eva Nason, Bangor.

Members of Omicron Nu

1937

Beatrice Florence Jones, Orono; Josie Victoria Naylor, Cumberland Mills; Lucinda Ewer Rich, Charleston.

1938

Miriam Ada Hilton, Mercer; Althea Hope Millett, Norway; Annette Helen Youngs, Bangor.

Members of Xi Sigma Pi

1937

Ralph Anthony Beisel, Lehighton, Pa.; William Robert Dinneen, Willimantic, Conn.; Raymond Knowles Dunlevy, Danforth; Thomas Bramlett Evans, Orono; John Cornell Greene, Jr., Orono; George Laurence Houston, Bangor; Robert Loring Ohler, Newton Centre, Mass.; Willett Rowlands, Needham, Mass.; Edward Stuart, Jr., Rockport, Mass.

1938

Douglas Raymond Best, St. Albans, Vt.; Ralph Edward Clifford, Dexter; Louis Benjamin Prahar, Englewood, N. J.; John Buchanan Ross, Bridgeport, Conn.

Scholarships and Prizes

The Merritt Caldwell Fernald Scholarship, Howard Mayo Goodwin, Brewer.
The James Stacy Stevens Scholarship, Francis Wilson Bradbury, Brewer.
The Harold Sherburne Boardman Scholarship, Sherman Vannah, Waldoboro.
The Leon Stephen Merrill Scholarship, Althea Hope Millett, Norway.
The Charles Davidson Scholarship, Helen Derry Abbott, Portland.
The University Scholarships, Richard Warren Akeley, Presque Isle; Anna Mirdza Anderson, Derby; Robert Harlan Bonney, Portland; Leon Joseph Breton, Rumford; Walton Earle Grundy, Auburn; Ida Mae Hart, Milbridge; Chester Morris Ladd, Waterville; Alice Pierce, Lunenburg, Mass.; Leona May Runion, Orono; Frances Sargent Smith, South Portland; Gerald Ellsworth Spofford, Kennebunk; Marjorie Taylor, Bangor; David White Trafford, Portland; Marion Rhoda Tufts, South Berwick; Randolph Hartwell West, North Berwick.
Trustee Graduate Scholarships—Rebecca Hazel Feero, Bath; Flora Hermion Lutz, Old Town; Gustavus Abbott McLaughlin, Dyer Brook; Velma Katherine Oliver, Dexter; Arthur Alton Webb, Brooks.
Trustee Graduate Fellowships—Gayland Earle Folley, South Portland; Sarah Comfort Pike, East Woodstock, Conn.; George Bradford Weatherbee, Jr., Hampden Highlands.
Maritime Provinces Graduate Scholarship—Agriculture, Jennie Amabel McIntosh, University of New Brunswick, Bath, N. B.
Secondary School Contest Scholarships, Awarded June, 1937:

Members of Class of 1941

Four-Year Scholarship

Clyde Weston Crockett, Portland High School, Portland.

Three-Year Scholarship

Ruth Elizabeth White, Bangor High School, Bangor.

Two-Year Scholarship

Alma Mabel Hansen, South Portland High School, South Portland.

One-Year Scholarship

Corrine Lovella Comstock, Stearns High School, Millinocket; Laurence Arthur Cooper, Jr., Edward Little High School, Auburn; Ruth Jean-

nette Garrison, Madison High School, Madison; Neal Harvey Walker, Lincoln Academy, Newcastle; Marjorie Marion Whitehouse, Cony High School, Augusta.

The Hovey Memorial Scholarships—Ruel Jotham Blackwell, Madison; Nelson Bradford Carter, Brewer; Alan Dallas Duff, Augusta; Alan Fred Kirkpatrick, Old Orchard Beach; Shirley Robinson Parsons, South Paris; John Clark Stinchfield, Wayne.

The Charles H. Hood Fund Scholarships—Thomas Levi Barker, Vassalboro; Arthur Leroy Crouse, Crouseville; Earle Edwin Gray, Anson; Walter Edward Hanley, Orono; Herbert Arthur Leonard, Thorndike; Arland Ritchie Meade, Auburn; Norman Eveleth Whitney, West Newton, Mass.

The W. H. Bowker Scholarships—Sterling Ellsworth Cobb, Lee; Frederick Marshall Crouse, Crouseville.

The Normal School Scholarships—(Castine) Venora Mary Stinchfield, Clinton; (Farmington) Ruth Evelyn Gregory, Rockland; Leon Tibbetts Malcolm, Augusta.

The General Alumni Association Scholarship, Donald Sanford Adams, Watertown, Mass.

The William Emery Parker Scholarship, Dwight Elmer Lord, Camden.

The Charles H. Payson Scholarships—Nelson Bradford Carter, Brewer; Mildred Mae Dixon, South Eliot; Virginia Smith Hall, Topsham; Lillian Roberta Herrick, Lisbon Falls; Virginia Mae Howe, Union; Ruth Howe Linnell, Pembroke; Alvalene May Pierson, Tenants Harbor; Elnora Louise Savage, Bangor; Margaret Elizabeth Trott, Bath.

The Bertha Joy Thompson Scholarhips—Louis Charles Costrell, Bangor; Miriam Ada Hilton, Mercer; Joseph Myron Johnson, Harrison; Cora Edra Sharon, Wrentham, Mass.; Anna Margaretha Simpson, South Gray; Madge Elizabeth Stacy, Shirley; Audrey Juanita White, South Portland.

The Women's Student Government Association Scholarships—Virginia Lucille Barstow, Brewer; Charlotte Rose Hennessy, Portland.

The New York Alumni Association Scholarship No. 1, Sargent Russell, North Leeds.

The New York Alumni Association Scholarship No. 2, Howard Mayo Goodwin, Brewer.

The Kidder Scholarship, Francis Wilson Bradbury, Brewer.

The Chicago Alumni Association Scholarship, Robert Harlan Bonney, Portland.

The Pittsburgh Alumni Association Scholarship, Albert Martin Ellingson, Milo.

The Joseph Rider Farrington Scholarship, Gerald Farrington Hart, Brewer.

The Stanley Plummer Scholarship, Richard Shailer Waldron, Dexter.
The Penobscot County Alumni Association Scholarships, Ernest Eugene Adams, South Brewer; Artemus Edwin Weatherbee, Bangor.
The Elizabeth Abbott Balentine Scholarship, Edna Louise Harrison, Newburgh, N. Y.
The Class of 1905 Scholarship, Robert Harlan Bonney, Portland.
The Carrol C. Jones Scholarship, William Prentiss Wright, Falmouth Foreside.
The Ohio Alumni Association Scholarship, Eldon Ralph Clark, Dennysville.
The Boston Alumni Association Scholarships, Alfred Francis Chatterton, Saugus, Mass.; Clark Glamis Kuney, Boston, Mass.
The Lincoln County Alumni Association Scholarship, Priscilla Day Haskell, Wiscasset.
The Philadelphia Alumni Association Scholarship, Dana Edgecomb Drew, Patten.
The Rhode Island Alumni Association Scholarship, Richard Quigley, Providence, R. I.
The Southern California Alumni Association Scholarship, Alton Sinclair Ham, Bangor.
The Waldo County Alumni Association Scholarship, William Henry Hatch, Dark Harbor.
The Worcester County Alumni Association Scholarship, Wilma Curtis, Searsport.
The York County Alumni Association Scholarship, Alan Fred Kirkpatrick, Old Orchard Beach.
The Connecticut Alumni Association Scholarship, Henry Paul Piorkowski, Union City, Conn.
The Knox County Alumni Association Scholarship, Stephen Keith Gross, Camden.
The Somerset County Alumni Association Scholarship, William Henry Craig, Bingham.
The Southern Kennebec Alumni Association Scholarship, Roger Maxim Stinchfield, Wayne.
The Piscataquis County Alumni Association Scholarship, Dora Louise Stacy, Shirley.
The Class of 1911 Scholarship, Mary Louise Wright, Falmouth Foreside.
The Agricultural Club Scholarship, Richard Woodman Gerry, Lewiston.
The Maine Farm Bureau Fund Scholarship, John Wesley Oliver, Orono.
The Chi Omega Sociology Prize, Barbara Fern Whittredge, Ansonia, Conn.
The Prize of the Class of 1873, Kenneth Lester Crabtree, Union.
The Alpha Omicron Pi Alumnae Prize, Patricia Kathryn Gogan, Bangor.

Sigma Mu Sigma Award, Artemus Edwin Weatherbee, Bangor.
The Pale Blue Key Award, Donald Calvin Smith, Easton.
The Henry L. Griffin Prize in English Composition, Edith Irene Whitman, Stonington.
Franklin Danforth Prize, Leslie Morton Hutchings, Portland.
The Greek Culture Prize, Marjorie MacKinnon, Topsham.
The Spanish Club Prize, Miriam Natalie Golden, Bangor.
The Robert C. Hamlet Prize, Leo Lee Lieberman, Bangor.
The Claude Dewing Graton Prize, Edwin Solomon Costrell, Bangor.
The Mary Ellen Chase Prize, Virginia Smith Hall, Topsham.
The Alpha Zeta Senior Award, Robert Elwin McKusick, Guilford.
Omicron Nu Scholarship, Priscilla Helen Hayes, North Windham.
The Class of 1908 Commencement Cup, Class of 1883.
Twentieth Century Commencement Cup, Class of 1912.
The Fraternity Scholarship Cup, Alpha Gamma Rho.
The Freshman Scholarship Cup, Hebron Academy.
The Washington Alumni Association Watch, Leslie Morton Hutchings, Portland.
The Portland Alumnae Association Watch, Elizabeth Marion Story, Pigeon Cove, Mass.
The Charles Rice Cup, Phi Kappa Sigma.

Commencement 1937

Wednesday, June 9

8:00 P.M. Commencement Ball—Alumni Memorial

Friday, June 11

11:00 A.M. Senior Class Meeting
1:30 P.M. Alumni Council Annual Meeting
1:45 Class Day Exercises—The Oval
3:15 Pageant—given by All-Maine Women—Coburn Green
4:30-6:00 President and Mrs. Hauck—"At Home"

Saturday, June 12

8:45 A.M. Reunion Class Meetings in headquarters rooms
9:00 Board of Trustees Meeting
10:00 General Alumni Association Annual Meeting—Alumni Hall
12:30 P.M. Alumni Luncheon—in honor of Dean James Norris Hart
1:30 University of Maine Foundation—Annual Meeting
2:00 Band Concert—Alumni Memorial Field House
2:30-3:30 Frolics—Alumni Memorial Field House
3:30-5:00 Alumnae Tea
3:45 Baseball Game—Alumni vs. Seniors—Baseball Field
6:00 Alumni Banquet—Alumni Memorial
9:00 Alumni Hop—Alumni Memorial

Sunday, June 13

10:30 A.M. Baccalaureate Service—Alumni Memorial
6:45 P.M. Alumni-Senior Sing in front of Library

Monday, June 14

9:30 A.M. Commencement Exercises—Alumni Memorial

Degrees Conferred, 1937

College of Agriculture

Bachelor of Science

IN AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

Edwin Hill Bates ..... Bath
Richard Donald Braley ..... Augusta
Richard Wilbur Briggs, *With Distinction* ..... Canton
Eugene Coffin ..... Harrington
Charles Herbert Delano ..... Bucksport
Floyd Manard Elwell ..... East Wilton
George Louis Findlen ..... Fort Fairfield
William Nelson Forman ..... Fitchburg, Mass.
George Robert Grange ..... Smyrna Mills
Nolan Berry Jackson ..... Norway
Clarence Kermit Keegan ..... Robinson's
Beverly Patterson Rand ..... Sherman Mills
Sargent Russell, *With Highest Distinction* ..... North Leeds
Mervale Wesley Sylvester ..... Mars Hill
Dana Thompson ..... Presque Isle
Harold Lewis Webb ..... Augusta
Harold Mace Woodbury ..... Portland

IN AGRONOMY

Robert Vinton Akeley ..... Presque Isle
Almon Francis Heald ..... Union
Thomas Edward Houghton, Jr. ..... Fort Fairfield
Donald Albert Piper ..... Stetson
Avery Edmund Rich ..... Charleston
Charles Byron Sibley ..... Stillwater

IN ANIMAL HUSBANDRY

Robert Carroll Jones ..... Wales

IN BACTERIOLOGY

Lucian Hollis Scamman ..... Portland

IN BIOCHEMISTRY

John Francis Thompson ..... Bangor

IN DAIRY HUSBANDRY

Robert Elwin McKusick, *With Highest Distinction* ..... Guilford
Lester Hurlin Smith ..... Buxton

IN DAIRY TECHNOLOGY

Robert Francis Corbett ..... East Parsonsfield
Robert Ellison DeWick ..... Wiscasset
Leslie Morton Hutchings, *With Highest Distinction* ..... Portland
Gustavus Abbott McLaughlin, *With High Distinction* ..... Dyer Brook

IN FORESTRY

Ralph Anthony Beisel ..... Lehighton, Pa.
Raynor Keith Brown ..... Norway Lake
Clifton Lewis Carroll ..... New Harbor
William Robert Dinneen ..... Willimantic, Conn.
Raymond Knowles Dunlevy ..... Danforth
Thomas Bramlett Evans, *With Distinction* ..... Orono
John Cornell Greene, Jr. ..... Orono
William Howard Hooper ..... Biddeford
George Laurence Houston, *With Distinction* ..... Bangor
Ira Chase Hubbard, Jr. ..... South Gardiner
Vaughan Handy Lancaster ..... Brownville
Albert Schoppee Landers, 3rd ..... Bangor
Robert Edward Laverty ..... Newton Centre, Mass.
William Henry Messeck, Jr. ..... Haverhill, Mass.
Robert Loring Ohler, *With Highest Distinction* ..... Newton Centre, Mass.
Andrew Waldemar Poulsen ..... Hudson Heights, N. J.
Kenneth Sherwood Pruett ..... Kittery
Willett Rowlands ..... Needham, Mass.
Edward Stuart, Jr. ..... Rockport, Mass.
George Richardson Trimble, Jr. ..... Stow
Robert Moody True ..... Newburyport, Mass.
Ralph Peter Verzoni ..... Waterville
Alfred Small Worcester ..... Southwest Harbor
Harold Edle Young, *With Distinction* ..... Miami, Fla.

IN HOME ECONOMICS

Hope Elizabeth Ashby ..... Caribou
Audrey Elaine Bishop ..... Caribou
Ruby Virginia Black ..... Portland
Evelyn Frances Boynton ..... Millinocket
Henrietta Cliff ..... Lincoln
Mildred Edith Covell ..... Monmouth
Constance Lucille Davenport ..... Winter Garden, Fla.
Emily Meribah Elmore ..... Augusta
Dorothy Beatrice Hutchinson ..... Old Town
Beatrice Florence Jones, *With Distinction* ..... Orono
Josie Victoria Naylor, *With Distinction* ..... Cumberland Mills
Lucinda Ewer Rich, *With Distinction* ..... Charleston
Margaret Llewelyn Thayer ..... Bangor
Helen Elizabeth Wooster ..... Old Town

IN HORTICULTURE

Edward Francis Brarmann ..... Englewood, N. J.
Pauline Calvert ..... Orono
Gayland Earle Folley ..... South Portland

IN POULTRY HUSBANDRY

Charles Barstow Buck ..... Naples

College of Arts and Sciences

Bachelor of Arts

IN CLASSICS

Flora Hermion Lutz, *With High Distinction* ..... Old Town
Marjorie MacKinnon, *With High Distinction* ..... Topsham
Florence Catherine Shannon ..... Bangor
Josephine Weick Snare, *With Distinction* ..... Hampden Highlands
Ralph Eugene Wentworth, *With High Distinction* ..... Bangor

IN ECONOMICS AND SOCIOLOGY

John Frank Averill ..... Fort Fairfield
Ruth Charlotte Burnett ..... South Brewer

Norman Davis Carlisle ..... Bangor
Thomas Joseph Allen Crozier ..... Portland
George Everett Edwards ..... Lincoln
Oliver Fuller Eldridge ..... North Adams, Mass.
Leonard Halle Gaetz ..... White Plains, N. Y.
Evelyn Gertrude Golden ..... Bangor
Gardner Coffin Grant ..... Cherryfield
George Ogilvie Harrison ..... Portland
Ralph Wilson Hawkes, Jr. ..... York Village
George Philip Hitchings, *With Highest Honors* ..... Orono
Allan Edgerly Horne ..... Milo
Darrel Francis Jordan ..... Livermore Falls
Marion Frieda Larsen ..... Cumberland Center
Jeannette Frances MacKenzie ..... New Haven, Conn.
James Francis O'Connor ..... Augusta
David Donnell Page ..... Fort Kent
Frederick Webster Parsons ..... West Medford, Mass.
Howard Josiah Stagg, III ..... Syracuse, N. Y.
Elizabeth Marion Story ..... Pigeon Cove, Mass.
Leo Viner ..... Bangor
Marjorie Louise Young ..... South Walpole, Mass.

IN ENGLISH

Newell Albert Avery ..... Bangor
Barbara Bertels ..... Bangor
Bertha Caroline Borden ..... South Portland
Francis Waldemar Boyle ..... Old Town
Carolyn May Brown ..... Skowhegan
Louise Rand Calderwood ..... Bath
Thomas William Churchill ..... Kezar Falls
Margaret Eleanor Crouse ..... Crouseville
Charlotte Irma Davis ..... Milford
Phyllis Marie Dimitre ..... Calais
Mary Alice Dunton ..... Bath
Elizabeth Gardner ..... Orono
Walter Irving Green ..... Bradford, Mass.
Helen Crane Hardison ..... Santa Paula, Calif.
Louise Eliza Hastings ..... Bangor
William Lounsbury Jackman ..... Orono
Ruth Kimball ..... Old Town

John Joseph Murray ..... Bath
Naida Barrows Sanders ..... Portland
Carol Elizabeth Stevens ..... Bath
Charles Forrest Treat ..... Orono
George Bradford Weatherbee ..... Hampden Highlands
Nancy Cushing Woods ..... Ellsworth

IN GERMAN

Adolph Adam Koran ..... Houlton

IN HISTORY

Mabelle Elizabeth Ashworth ..... Orono
Katherine True Bryant ..... Bangor
Madeline Louise Frazier ..... Norwood, Mass.
Elva Elizabeth Googins ..... Ellsworth
Irene Annie Olsen ..... Patten
Robert Holmes Salisbury ..... Ellsworth
Alice Rose Stewart, *With Highest Honors* ..... Brunswick

IN MATHEMATICS

Anna Ruth Currie ..... Bangor
John Emerson Hart ..... Orono
Bernice Willard Hopkins ..... Belfast
Bernard Gordon Perkins ..... Orono
William Lawrence Whiting ..... Portland
Raymond Stanley Willett ..... Stetson

IN PHILOSOPHY

Edward Homer Redman, *With Honors* ..... Bangor

IN PHYSICS

George William McLellan ..... Old Town
John Alvin Pierce ..... Cambridge, Mass.

IN PSYCHOLOGY

Marguerite Lillian Avery ..... Haverhill, Mass.
Katherine Cook Bunker ..... Calais
Gardner Wilcox Fay ..... Needham, Mass.
Faith Gertrude Folger, *With High Distinction* ..... Fryeburg
Jerold Maxwell Hinckley ..... Bluehill

Frances Edith King ..... Bethel
Kenneth Hewes Leathers ..... Kennebunkport
Ruth Edith Lewis ..... Springfield
Regina Carol Littlefield ..... Portland
Margaret Snow ..... Portland
Jane Stillman ..... Northeast Harbor
Lois Frances Widrow ..... Portland

IN ROMANCE LANGUAGES

Yvonne Marie Gonya ..... Millinocket
Barbara Alice Lancaster ..... Old Town
Hope Eleanor Wing ..... Fairfield

IN ZOOLOGY

Winford Charles Adams ..... Island Falls
Robert Laurie Allen ..... Rockland
Sylvia Elizabeth Alpert ..... Bangor
Manley Leroy Barry ..... Orono
William Freeman Bishop ..... Caribou
Wendell Swanton Brewster ..... Dexter
Paul Webber Burke, *With High Distinction* ..... Bangor
Walter Lamont Butterfield, Jr. ..... Dexter
Philip Thomas Casasa ..... Portland
Lawrence Dennis ..... Ellsworth
Arthur Merton Gillespie ..... Ellsworth
Thomas Edward Keresey ..... Gardner, Mass.
Wesleyan Bell Saunders Manning ..... New York, N. Y.
John Fessenden Miller ..... Camden
Ralph Simon Palmer, *With High Honors* ..... Brunswick
Roger William Smith ..... Presque Isle
Helen Ernestine Titcomb ..... New Gloucester

School of Education

BACHELOR OF ARTS IN EDUCATION

Jeannette Rosamond Goldsmith ..... South Paris
Burleigh Houston Roderick ..... Augusta

Bachelor of Science in Education

Ronald Glendon Billings ..... North Ellsworth
Phyllis Joan Black ..... Vinalhaven
Raoul Joseph Bourgoin ..... Frenchville
Irma Dunning Brown ..... Old Town
Barbara Colby ..... South Paris
Julia Bridget Cox ..... Freeport
Lola Murch Culver ..... Jacksonville, Fla.
Ralph Leo Foster ..... Frenchville
John Cook Moore Gardner, Jr. ..... Castine
William Verdelle Haskell ..... Presque Isle
Lloyd Douglas Hatfield ..... South Brewer
Errald Gordon Jones ..... Brownville
Harold Edwyn MacLauchlan ..... Addison
Philip Rittal Mealey ..... Machias
Harry Lambert Mickalide ..... Farmington
Raymond Ellsworth Morton ..... Gorham
Doris Kelley Motz ..... Mt. Desert
Rolf Brown Motz ..... Mt. Desert
Leander Martin Neale ..... East Machias
Alvah Lewis Nickerson ..... Damariscotta
Clyde Billings Nickerson ..... Belfast
James Franklin Norwood ..... Southwest Harbor
Edward Arnold Perkins ..... Castine
Hilda Gertrude Scott ..... Bath
Martha Simmons, *With High Distinction* ..... Sargentville
Alonzo Henry Tuck ..... Stonington
Arthur Alton Webb ..... Brooks

Bachelor of Science in Commercial Education

Merle Stanley Goodwin ..... East Corinth

College of Technology

Bachelor of Science

in chemistry

Everett Leighton Brewer, *With Highest Distinction* ..... Portland
Robert Anderson Cabeen ..... Provincetown, Mass.

Joseph Wilfred Cyr ..... Bath
Robert Howard Homstead ..... Orono
Paul Winthrop Morgan, *With High Distinction* ..... Thomaston
Russell Lermond Morgan ..... Thomaston
Charles Howard Stinchfield ..... Wayne
John Clark Stinchfield ..... Wayne

IN CHEMICAL ENGINEERING

James Craig Cameron ..... Old Town
Ernest Maxwell Foster ..... Weld
William Irving Kierstead ..... Rockland, Mass.
James Bryan Morrison, Jr. ..... Bradford Center
Emery Newhall Wescott ..... Portland

IN CIVIL ENGINEERING

Henry Joseph Aliberti ..... Portland
John Francis Bennett, Jr. ..... Portland
Wilbert Hammond Fifield ..... Auburn
Wesley Maxwell Martin ..... Vineyard Haven, Mass.
Ronald Ira Mayo ..... Brewer
Roderick Edward Mullaney, Jr. ..... Bangor
Ralph Linwood Norman ..... South Berwick
Howard Earle Shaw, Jr. ..... Portland
Richard Byron Staples ..... Gardiner
Harland Avery Young ..... Matinicus

IN ELECTRICAL ENGINEERING

Henry Maxson Brown ..... Francestown, N. H.
Woodford Bradbury Brown, *With Highest Distinction* ..... Bangor
Dexter Linwood McCausland ..... Portland
Everett Belknap Mack ..... Bangor
Arland Wentworth Peabody ..... East Corinth
Richard Alonzo Pfuntner, *With High Distinction* ..... Guilford

IN GENERAL ENGINEERING

Henry Testman Andersen ..... Lyme, Conn.
Wendell Merton Bagley, *With Highest Distinction* ..... Troy
Alton Leroy Bell ..... Dennysville
Richard Nathaniel Berry, *With Distinction* ..... Malden, Mass.
Edward Burnham Cotton ..... Bangor

WINSLOW BAKER SMITH ..... Brewer
GERALD EARLE STOUGHTON, *With Highest Distinction* ..... Orono
EDWARD PARSONS WOOD ..... North Edgecomb

IN MECHANICAL ENGINEERING

PHILIP NICHOLS BOWER, *With High Distinction* ..... Auburn
ELWOOD DANTON BRYANT ..... Bangor
LLOYD ALLEN BUCKMINSTER ..... Sedgwick
ARTHUR TOBEY CLEAVES ..... Sangerville
WILLIAM ELEAZOR CROWELL, *With Highest Distinction* ..... South Portland
ELMER FRANCIS CROWLEY ..... Greenville
ALAN DALLAS DUFF, JR. ..... Augusta
LEONARD FELBERG ..... Brooklyn, N. Y.
CRANSTON WESLEY FOLLEY, *With Distinction* ..... South Portland
JOSEPH GALBRAITH, JR. ..... Pleasant Plains, Staten Island, N. Y.
CARL FOULKES GOLDING ..... Milo
CARL GUSTAVE HEBEL ..... Brewer
DONALD CAMPBELL KILGOUR ..... Lovell
LEONARD PERCY LITCHFIELD ..... Bath
RAYMOND ARTHUR LLOYD ..... Portland
GEORGE HOLLAND MADER ..... Beverly, Mass.
JOHN JOSEPH MINIUTTI ..... North Berwick
REGINALD FREY MURPHY ..... Bangor
DEWING PROCTOR ..... Portland
CHARLES KEMPTON SAWYER ..... Searsport
LAWRENCE ARTHUR SEVERY ..... Marblehead, Mass.
RICHARD MARCUS SPEAR, *With High Distinction* ..... Thomaston
MERTON ROGERS SUMNER ..... Rockland
SAMUEL ELLIOT SWASEY ..... Marblehead, Mass.
ARTHUR LINWOOD THAYER, JR. ..... Bangor
GEORGE SETH WILLIAMS, JR. ..... Gardiner
NEWELL JOHNSON WILSON ..... Bath

IN PULP AND PAPER TECHNOLOGY

JOHN ALBERT BESSOM ..... Marblehead, Mass.
HARRY BROOKS CONNER ..... Castine
JUDSON AUSTIN JUDE ..... Ellsworth Falls
SHIRLEY ROBINSON PARSONS, *With Highest Distinction* ..... South Paris
WILLIAM PHILLIPS STILLMAN ..... Greene, R. I.

Degree Out of Course

Bachelor of Science

Ernest Victor Cram (In Civil Engineering) ..... Millinocket
(As of the Class of 1918)

Advanced Degrees

Master of Arts

IN EDUCATION

Harry Kittredge Foster (B.S., Bates, 1934) ..... Canton
The Status of Science Teaching in the Secondary Schools of Maine

Carolyn Elizabeth McIntosh (B.A., Maine, 1932) ..... Bangor
The History of Teachers' Associations in Maine

Frank Leander Staples Morse (B.A., Maine, 1922) ..... Rockland
The History of Secondary Education in Knox and Lincoln Counties in Maine

Florence Taylor Royal (B.A., Maine, 1911) ..... Branford, Conn.
A Comparison of the Results of Drill and Supervised Study in First Year Algebra and Plane Geometry Classes

Charles Augustus Snow (B.A., Maine, 1920) ..... Fryeburg
The History of the Development of Public School Supervision in the State of Maine

Martha Mae Tobey (A.B., Colorado Teachers College, 1920) ..... Westfield, Mass.
A Study of the Understanding of Informational Arithmetic Material Possessed by Children in the Grades below the Fourth

Daphne Marguerite Winslow (B.A., Maine, 1927) ..... Fryeburg
Appraisal of French Textbooks Used in the Secondary Schools of the State of Maine with Special Reference to Modern Language Teaching Objectives

IN ENGLISH

Donald Merwyn Stewart (B.A., Maine, 1935) ..... East Haven, Conn.
An Analysis of John Ruskin's Approach to Victorian Social Economy

IN HISTORY

GEORGE MILTON HARGREAVES (B.A., Maine, 1931) ..... Ludlow, Mass.
History of the Quakers in New Bedford and Vicinity

IN PHYSICS

MERLE HENRY BRAGDON (B.A., Maine, 1936) ..... Westfield
The Movement of Alternating Current Coils in Steady Magnetic Fields

MASTER OF SCIENCE

IN ANIMAL INDUSTRY

ALAN CAMPBELL CORBETT (B.S., Maine, 1936) ..... Orono
An Investigation of the Effect of Mastitis on Certain Tests of Milk Quality

IN CHEMISTRY

ERNEST MAYLAND CRAM (B.S., Maine, 1935) ..... Winthrop
The Preparation and Reactions of Diazo Methane and some Substituted Diazo Methanes

IN CHEMICAL ENGINEERING

ELDEN EVERETT LIGHT (B.S., Maine, 1931) ..... Orono
An Investigation of the Reaction of Sodium-Potassium Alloy on Various Grignard Reagents. II.

WILLIAM PROCTOR NEWMAN, JR. (B.S., Maine, 1936) ..... Bangor
A Study of the Use of Arsenious Oxide and Sodium Arsenite Solutions in the Analysis of Pyrolusite

IN CIVIL ENGINEERING

LEWIS OLOF JOHNSON (B.S., Maine, 1934) ..... Bangor
A Study of the Relationship of Speed and Superelevation to Highway Curves in Maine

IN EDUCATION

SIDNEY OSBORNE (B.S., Maine, 1924) ..... Huntington, Mass.
An Educational and Occupational Survey of the Huntington School District to Determine the Effective

Relationship of the High School Experience to the
Lives of Huntington High School Graduates

IN ELECTRICAL ENGINEERING

JOHN MATTHEWS COOMBS (B.S., Maine, 1936) ..... Boothbay Harbor
Direct-coupled Amplifiers

WENDELL EUGENE MATCHETT (B.S., Maine, 1936) ..... Bangor
A Study of the Influence of Frequency and Temperature
on the Capacitance and Phase Angle of Condensers
Employing Liquid Dielectrics

MASTER OF SCIENCE IN EDUCATION

HELEN IRWIN MCDONOUGH (B.S., Farmington Normal, 1930) ..... Bangor
A Study of Home Economics Equipment

Certificate

IN THE TWO-YEAR COURSE IN AGRICULTURE

DONALD EMERY BOWDEN ..... Orland
JAMES GOODWIN GRIFFIN ..... Lisbon Falls
WALTER WILSON SPROWL ..... Appleton
ALTON DOBLE WILCOX ..... Caribou

Major Honors

GEORGE PHILIP HITCHINGS	*With Highest Honors*
RALPH SIMON PALMER	*With High Honors*
EDWARD HOMER REDMAN	*With Honors*
ALICE ROSE STEWART	*With Highest Honors*

Departmental Honors

COLLEGE OF ARTS AND SCIENCES

IN CLASSICS

FLORA HERMION LUTZ
MARJORIE MACKINNON

JOSEPHINE WEICK SNARE
RALPH EUGENE WENTWORTH

IN ECONOMICS AND SOCIOLOGY

GEORGE PHILIP HITCHINGS

IN ENGLISH

GEORGE BRADFORD WEATHERBEE
JOHN JOSEPH MURRAY

IN HISTORY AND GOVERNMENT

ALICE ROSE STEWART

IN MATHEMATICS AND ASTRONOMY

ANNA RUTH CURRIE
JOHN EMERSON HART
BERNICE WILLARD HOPKINS
BERNARD GORDON PERKINS

IN ZOOLOGY

PAUL WEBBER BURKE
WALTER LAMONT BUTTERFIELD, JR.
RALPH SIMON PALMER

The following received commissions as Second Lieutenant Officers' Reserve Corps

INFANTRY

ALTON LEROY BELL
RICHARD NATHANIEL BERRY
EDWARD FRANCIS BRARMANN
WOODFORD BRADBURY BROWN
ELWOOD DANTON BRYANT
NORMAN DAVIS CARLISLE
JAMES FREDERICK DOW
ALAN DALLAS DUFF, JR.
RAYMOND KNOWLES DUNLEVY

Joseph Galbraith, Jr.
Thomas Edward Houghton, Jr.
John Robert McDougall
George William McLellan
John Joseph Miniutti
Leo Joseph Murphy
Reginald Frey Murphy
Shirley Robinson Parsons
Arland Wentworth Peabody
Howard Earle Shaw, Jr.
Howard Josiah Stagg, III
Edward Stuart, Jr.
George Seth Williams, Jr.

Honorary Degrees

Lewis Orin Barrows, Doctor of Laws
Benjamin Brewster, Doctor of Humane Letters
Robert Peter Tristram Coffin, Doctor of Letters
Ralph Leslie Hunt, Doctor of Education
Edith Marion Patch, Doctor of Science

Catalog of Students

Major subjects are indicated as follows: Ae. Agricultural Education, Ag. Agronomy, Agr. Agriculture, An. Animal Husbandry, Bc. Biological Chemistry, Bl. Biology, Bt. Botany, By. Bacteriology, Ch. Chemistry, Ch.Eng. Chemical Engineering, Ce. Civil Engineering, Cl. Classics, Dh. Dairy Husbandry, Di. Dairy Industry, Dr. Drama, Dt. Dairy Technology, Ed. Education, Ee. Electrical Engineering, Eh. English, En. Entomology, Eng. Engineering (Course not specified), Es. Economics and Sociology, Fm. Agricultural Economics and Farm Management, Fr. French, Fy. Forestry, Ge. General Engineering, Gm. German, Gt. Government, Hy. History, He. Home Economics, Ht. Horticulture, Lt. Latin, Mc. Music, Me. Mechanical Engineering, Ms. Mathematics, Pa. Pulp and Paper Technology, Pc. Physiological Chemistry, Pg. Physiology, Ph. Poultry Husbandry, Pl. Philosophy, Pp. Plant Pathology, Ps. Physics, Py. Psychology, Rl. Romance Languages, Wc. Wild Life Conservation, Zo. Zoology. Chemistry in the College of Arts and Sciences is indicated by Ch.A.

GRADUATE STUDENTS

Arno, John Raymond, B.S., Ag. Maine, 1936	*Dexter*	Experiment Station
Bailey, Dean Manter, B.S., Bl. Maine, 1936	*Orono*	Park Street
Berzon, Bernard L., B.A., Sy. Yeshiva, 1935	*Bangor*	239 Pine Street, Bangor
Blackmer, Leroy Lewis, Jr., B.S., Ps. Massachusetts State, 1937	*North Brookfield, Mass.*	K Σ House
Bradford, Robert Bruce, B.S., Me. Maine, 1934	*Orono*	77 Mill Street
Buehrer, Bernardine, B.A., Eh. University of Texas, 1922	*Orono*	23 Bennoch Street
Desjardins, Lionel Louis, B.A., Ed. Maine, 1934	*Old Town*	122 South Brunswick Street, Old Town
Dick, Leo Alexander, B.S., By. Wisconsin, 1935	*Marshfield, Wis.*	51 North Main Street

Dike, Kenneth Wilcox, B.S., An. Vermont, 1936	*Bristol, Vt.*	25 Myrtle Street
Edwards, Albert Edward, B.Sc., Ch. New Brunswick, 1936	*Orono*	14 Middle Street
Feero, Rebecca Hazel, B.A., Ed. Maine, 1934	*Bath*	225 Main Street
Folley, Gayland Earle, B.S., Ht. Maine, 1937	*South Portland*	382 College Road
Gashwiler, Jay Schooling, B.S., Wc. Oregon State, 1937	*Novinger, Mo.*	95 Mill Street
Getchell, John Simmons, B.A., By. Maine, 1936	*Oakland*	38 Oak Street
Hedin, Constance Lowell, A.B., Eh. Vassar, 1937	*Bangor*	State Hospital, Bangor
Johnson, Robert Holm, B.S., Wc. Idaho, 1937	*Malden, Mass.*	95 Mill Street
Lamson, Arroll Liscomb, B.A., Wc. Connecticut State, 1933	*Storrs, Conn.*	12 Middle Street
Lendo, Alexander Chester, B.S., Ce. Worcester Polytechnic Institute, 1933	*Otter River, Mass.*	16 Pine Street
Loughrey, Josephine Monica, B.S. in Ed., Ed. Worcester State Teachers', 1936	*Worcester, Mass.*	80 Mill Street
Lutz, Flora Hermion, B.A., Ed. Maine, 1937	*Old Town*	45 South Fourth Street, Old Town
McIntosh, Jennie Amabel, B.Sc., Bc. New Brunswick, 1936	*Bath, N. B., Canada*	23 Bennoch Street
McLaughlin, Gustavus Abbott, B.S., Fm. Maine, 1937	*Dyer Brook*	Φ H K House
Mann, Bernard Jerome, B.A., Fr. Maine, 1933	*Bangor*	43 Parkview Avenue, Bangor
Marsh, Joel White, B.S., Wc. Maine, 1935	*Portland*	Φ K Σ House
Meader, Leon Burton, B.A., Hy. Wheaton, 1935	*Brooklin*	Brooklin
Morris, Thomas Whaley, B.S., Ps. Michigan State, 1936	*Lansing, Mich.*	Λ X A House
O'Brien, Donal Francis, B.S., Wc. Rhode Island State, 1936	*Newport, R. I.*	48 Pierce Street

Oliver, Velma Katherine, B.A., Eh. Maine, 1925	*Dexter*	South Hall
Perkins, Bernard Gordon, B.A., Ms. Maine, 1937	*Orono*	37 Middle Street
Pike, Sarah Comfort, B.S. in Ed., Ed. Maine, 1936	*East Woodstock, Conn.*	225 Main Street
Prince, Alton Ernest, B.S., Bt. Maine, 1936	*Orono*	279 Main Street
Rich, Avery Edmund, B.S., Pp. Maine, 1937	*Charleston*	Α Γ Ρ House
Smith, Harold Winston, B.S., Di. Illinois, 1936	*Orono*	158 Main Street
Smith, Lester Hurlin, B.S., Ag. Maine, 1937	*Gorham*	Α Γ Ρ House
Sparrow, Theron Alonzo, B.S., Me. Maine, 1924	*Orono*	10 Main Street
Titcomb, Helen Ernestine, B.A., Zo. Maine, 1937	*New Gloucester*	31 Hill Street
Weatherbee, George Bradford, Jr., B.A., Eh. Maine, 1937	*Hampden Highlands*	10 Oak Street, Old Town
Webb, Arthur Alton, B.S. in Ed., Ms. Maine, 1937	*Brooks*	16 Pine Street
Weil, William Martin, A.B., Pa. Cornell University, 1937	*Brooklyn, N. Y.*	Τ Ε Φ House
Weill, Genevieve Annette, B. ès L., L. ès L., Eh. University of Paris, 1934, 1937	*Paris, France*	Balentine Hall
Woodbury, Harold Mace, B.S., Ed. Maine, 1937	*Portland*	Φ Κ Σ House

SENIORS

Abbott, Helen Derry, Ed.	*Portland*	Colvin Hall
Adams, Donald Sanford, Ce.	*Watertown, Mass.*	212 H. H. Hall
Adams, Ernest Eugene, Ch.Eng.	*South Brewer*	412 South Main Street, South Brewer
Additon, Elwood Prince, Ch.Eng.	*Rumford*	Φ Γ Δ House
Allen, Hervey Clifford, Es.	*Rockland*	Κ Σ House
Alpert, Sidney, Zo.	*Bangor*	137 State Street, Bangor

Ames, Sidney Ernst, Es.	*Orono*	22 Mill Street
Andrews, Ernest Frederick, Pa.	*Ticonderoga, N. Y.*	Φ Γ Δ House
Andrews, Ernestine Elizabeth, Py.	*Bingham*	Colvin Hall
Armstrong, James Oliver, Jr., Fy.	*Norwich, Conn.*	Φ M Δ House
Baker, Vance Durgin, Me.	*The Forks*	K Σ House
Barnard, John Everett, Dh.	*Kittery*	A Γ P House
Barnes, Ronald Eugene, Ag.	*Fort Fairfield*	Φ H K House
Barone, Louis Nicholas, Zo.	*Quincy, Mass.*	University Cabin
Bartlett, Russell Doe, Fy.	*Rockland*	K Σ House
Bassett, Margaret, Py.	*Westbrook*	Colvin Hall
Bates, Keith Malcolm, Ht.	*Groton, Mass.*	Σ N House
Bean, James Lyle, En.	*Easton*	Φ K Σ House
Beck, Fred Nelson, Es.	*Washburn*	A T Ω House
Benjamin, Marguerite Mary, He.	*Mars Hill*	Balentine Hall
Berkowitz, Leonard Irving, Gt.	*Mattapan, Mass.*	T E Φ House
Best, Douglas Raymond, Fy.	*St. Albans, Vt.*	Φ M Δ House
Billings, Hester Anita, Ms.	*Bangor*	20 Sixth Street, Bangor
Blake, Kenneth Stanford, Eh.	*Dexter*	A T Ω House
Bouchard, Roger Gerald, Es.	*Caribou*	Δ T Δ House
Boyer, Azalea Ladner, Eh.	*Kittery Point*	Balentine Hall
Boyer, Richard Porter, Jr., Ee.	*Newton, Mass.*	384 College Road
Bradbury, Francis Wilson, Zo.	*Brewer*	224 Wilson Street, Brewer
Britt, Richard Horn, Ce.	*Rockland*	18 Oak Street
Brookes, Kenneth, Eh.	*Rockville, Conn.*	Bangor Theological Seminary, Bangor
Brookes, Leslie, Rl.	*Rockville, Conn.*	Σ X House
Brown, Barbara True, Eh.	*Bath*	Balentine Hall
Brown, Gilbert Merrill, Fm.	*Gloucester, Mass.*	Δ T Δ House
Brown, Lloyd Fremont, Ce.	*Augusta*	Δ T Δ House
Brown, Minnie Estelle, Ed.	*Waterville*	Balentine Hall
Bruce, Bettina Evelyn, He.	*Nahant, Mass.*	Balentine Hall
Bryant, Stuart Graham, Me.	*Newcastle*	Δ T Δ House
Burgess, Richard Furniss, Fy.	*Meriden, Conn.*	A T Ω House
Butler, Donald Walton, Hy.	*Portland*	B Θ Π House
Butler, Ralph William, Ce.	*South Berwick*	Σ N House
Cain, Charles Yetts, Pa.	*Portland*	K Σ House
Calderwood, George Curtis, Zo.	*Roxbury, Mass.*	B Θ Π House
Carr, Robert Venn, Ce.	*Bridgeport, Conn.*	A T Ω House
Carswell, David Flockhart, Ht.	*Bar Harbor*	Horticulture Greenhouse

Carter, Nelson Bradford, Ch.Eng.	*Brewer* 12 Brimmer Street, Brewer
Cary, Hugh Rudolph, Es.	*Newport* Α Τ Ω House
Chapman, William Follett, Fy.	*Portland* Φ Κ Σ House
Chase, Martha Marden, Ed.	*Bucksport* Colvin Hall
Chatterton, Alfred Francis, Es.	*Saugus, Mass.* Θ Χ House
Chute, Gordon Libby, Fy.	*Harrison* Σ Α Ε House
Clark, Albert Lewis, Fy.	*Camden* Φ Κ Σ House
Clement, Irving Herbert, Me.	*Milo* 34 Forest Avenue
Clement, June Vinette, He.	*Wellesley, Mass.* Balentine Hall
Clifford, Ralph Edward, Fy.	*Dexter* 18 Forest Avenue
Clough, Susie Betty, He.	*Lewiston* Balentine Hall
Cobb, Lucy Margaret, He.	*Belfast* Balentine Hall
Cohen, Sylvia Esther, Py.	*Bangor* 50 East Summer Street, Bangor
Conley, Olive Elizabeth, Eh.	*Ellsworth* South Hall
Costrell, Edwin Solomon, Eh.	*Bangor* 233 Parkview Avenue, Bangor
Costrell, Rose Lilian, Es.	*Bangor* 233 Parkview Avenue, Bangor
Cotes, Kermit Rodney, Ch.Eng.	*Derby* Φ Η Κ House
Cotting, Duncan, Es.	*Newton, Mass.* Β Θ Π House
Cox, Joan, He.	*Bangor* Balentine Hall
Crafts, Howard Jefferson, Ch.Eng.	*Portland* Α Χ Α House
Crouse, Arthur Leroy, An.	*Crouseville* Φ Η Κ House
Currier, Ethelmae, He.	*Caribou* North Hall
Curtis, Grace Rodger, Eh.	*Danforth* Balentine Hall
Daigle, Yvonne, Ed.	*St. Francis* 23 Pond Street
Dauphinee, Mildred Evelyn, Rl.	*Bangor* 60 Sixth Street, Bangor
Davis, Madeleine Crawford, Ed.	*Biddeford* Balentine Hall
DeCoster, James Robert, Pa.	*South Portland* Φ Μ Δ House
Deering, Mary Lowell, He.	*Orono* 160 College Road
DeLong, John Barker, Zo.	*Glens Falls, N. Y.* 50 Forest Avenue, Bangor
Denning, Lawrence Francis, Ph.	*Orono* 16 Pine Street
Diehl, Helene Winifred, Es.	*North Sullivan* Colvin Hall
Dixon, Mildred Mae, Rl.	*South Eliot* Balentine Hall
Donagan, Ernest Hall, By.	*West Medford, Mass.* Φ Μ Δ House
Doubleday, Edward Sherburne, Fy.	*St. Albans, Vt.* Φ Μ Δ House
Douglass, John Quinn, Es.	*Hallowell* 9 Cooper Street, Old Town

Doyle, Edward Houlton, Jr., Es.	*Caribou*	Θ X House
Drummond, Elizabeth Beverly, Eh.	*Orono*	Colvin Hall
Dunlap, Stanley Thomas, Es.	*Portland*	Φ Γ Δ House
Edwards, Lewis William, Ce.	*South Portland*	Λ X A House
Edwards, Richard Stephen, Fy.	*Malden, Mass.*	A T Ω House
Eldridge, Merrill, Pa.	*Bangor*	B Θ Π House
Ellingson, Albert Martin, Me.	*Milo*	Φ H K House
Elliott, Roderick Rogers, Fm.	*Montreal, West, Que., Canada*	Φ K Σ House
Fairfield, Loran Radford, Me.	*South Portland*	Θ X House
Fellows, Nathan Warren, Jr., Wc.	*Scarsdale, N. Y.*	Φ K Σ House
Felt, Lester Albert, Dh.	*Bryant Pond*	Farm Boarding House
Fiedler, Raymond Edward, Eh.	*Orono*	35 Grove Street
Fillebrown, Charles Augustus, Dt.	*Waterford*	A Γ P House
Fish, Lincoln, Py.	*Concord, Mass.*	106 Oak Hall
Fitch, Karl Albert, Ph.	*New Sharon*	University Cabin
Flynn, James Hammond, Ms.	*Machiasport*	Λ X A House
Ford, Mary Ella, Eh.	*Brooklin*	Balentine Hall
Ford, William George, Pa.	*South Hadley Falls, Mass.*	Φ Γ Δ House
Forde, Madison Shepherd, Eh.	*Kingston, N. Y.*	11 Beech Street
Forrestall, Howard Warren, Es.	*Portland*	Φ K Σ House
Fortier, Francis Brett, Fy.	*Dexter*	College Road
Fowler, George Turner, Ag.	*Fort Fairfield*	Φ H K House
Fowlie, Howard Douglass, Ed.	*Monroe*	25 Grove Street
Fox, Basil Sterling, Fm.	*Washburn*	Φ H K House
Frost, John Eldridge, Hy.	*York Village*	12 Park Street
Frost, Mary Eldridge, He.	*York Village*	20 Forest Avenue
Füger, Stanley, Jr., Py.	*Cape Elizabeth*	Φ Γ Δ House
Fuller, Robert Lendall, Es.	*Portland*	Φ K Σ House
Gagnon, Maxine Frances, Ed.	*Eagle Lake*	Colvin Hall
Gerry, Richard Woodman, Ph.	*Lewiston*	Φ M Δ House
Getchell, Amasa Stanley, Ch.	*Bangor*	267 Forest Avenue, Bangor
Gilbert, Hamlin Miller, Gt.	*Hartford, Conn.*	Σ A E House
Ginsberg, Sewall Jerome, Gt.	*Old Town*	144 Main Street, Old Town

Gleason, Wallace Fred, Jr., Ms.	*South Portland*	Λ X A House
Glover, William Albert, Jr., Ce.	*Rockland*	Θ X House
Goodwin, Howard Mayo, Ge.	*Brewer*	Λ X A House
Gowell, John Robert, Me.	*South Portland*	102 Oak Hall
Grant, Douglas Creighton, Fy.	*Medford, Mass.*	Σ N House
Gray, Earle Edwin, An.	*Anson*	A Γ P House
Gregory, Philip Lawrence, Ce.	*North Weymouth, Mass.*	16 Pine Street
Grodinsky, Harold Morris, Ms.	*Bangor*	187 Ohio Street, Bangor
Gross, Lorraine Webb, Eh.	*Auburn*	Colvin Hall
Gruginskis, Elizabeth Martha, He.	*Rumford*	Colvin Hall
Guiou, Iris Louise, He.	*Presque Isle*	Colvin Hall
Haggett, John Daniel, Ch.Eng.	*North Edgecomb*	Δ T Δ House
Hall, Virginia Smith, Eh.	*Topsham*	Colvin Hall
Ham, Alton Sinclair, Ce.	*Bangor*	College Road
Hamilton, Bernice Mae, Dr.	*North Uxbridge, Mass.*	Balentine Hall
Hamlin, Joseph Hamor, Eh.	*Bar Harbor*	B Θ Π House
Hanscom, Carolyn Perkins, Py.	*Ogunquit*	Colvin Hall
Harding, Helen Gertrude, Ed.	*Stockton Springs*	Colvin Hall
Harding, Theodore Parker, Zo.	*New York, N. Y.*	A T Ω House
Hardison, Waldo Flanders, Fm.	*Caribou*	Δ T Δ House
Hargreaves, Reginald Lester, Ed.	*New Bedford, Mass.*	40 Middle Street
Harriman, John Franklin, Ed.	*Bar Harbor*	College Road
Hart, Gerald Farrington, Ee.	*Brewer*	R. 5, Brewer
Hart, Ida Mae, Rl.	*Milbridge*	Balentine Hall
Harvey, Robert Willis, Me.	*New Haven, Conn.*	Δ T Δ House
Hatch, Marion Estelle, Eh.	*Melrose, Mass.*	Colvin Hall
Hatt, Raymond Harold, Me.	*Patten*	Σ X House
Havener, Charles Edward, Ee.	*Rockland*	Σ X House
Hayes, Richard Edmund, Ce.	*Lewiston*	B Θ Π House
Healy, Richard Wyman, Ms.	*Augusta*	Λ X A House
Hendrickson, Karl Newcomb, Ge.	*Brewer*	1 James St., Brewer
Hennings, Nancy, Ms.	*Oakland*	Colvin Hall
Hersey, Alvin Kingsbury, An.	*North Waterford*	130 North Fourth Street, Old Town
Higgins, Orin Jackson, Es.	*Mapleton*	47 Mill Street
Hight, Diana Elizabeth, Py.	*Skowhegan*	Colvin Hall

Hill, George Dourian, Pa.	*Oakland*	Σ A E House
Hilton, Miriam Ada, He.	*Mercer*	Balentine Hall
Hodges, Arthur Webster, Jr., Zo.	*Newton Centre, Mass.*	Λ X A House
Hodgkins, Ellen Bailey, Es.	*Bath*	Balentine Hall
Holman, Blanche Bertha, Eh.	*Norwood, Mass.*	Balentine Hall
Holt, Erastus Eugene, Ee.	*Portland*	18 Oak Street
Hooper, John Francis, Ch.	*Old Town*	154 North Brunswick Street, Old Town
Horblit, David Mordecai, Es.	*Brookline, Mass.*	12 Park Street
Hunnewell, William French, Pa.	*Madison*	Σ A E House
Hurwitz, Sidney Nathaniel, Ms.	*Roxbury, Mass.*	312 H. H. Hall
Hussey, Robert Sylvanus, Es.	*Bangor*	112 Oak Hall
Hussey, William Penn, Ch.	*Old Town*	290 South Main Street, Old Town
Hutchinson, Eloise Audine, Ed.	*Skowhegan*	100 Main Street
Ingalls, Gerard William, Ed.	*Bar Harbor*	B Θ Π House
Inglee, Lewis, Jr., Ph.	*Amityville, L. I., N. Y.*	395 College Road
Ireland, Richard Maxwell, Ee.	*Biddeford*	Φ K Σ House
Jones, Francis Clough, Fm.	*Orono*	164 College Road
Judkins, Fred Sanborn, Ph.	*Upton*	25 Grove Street
Kelley, Donald Palmer, Ee.	*South Portland*	Φ K Σ House
Kenneson, Harvey Carl, Ee.	*Portland*	Σ N House
Kent, Jean Stafford, Es.	*Bangor*	Balentine Hall
Kimball, Bartlett, Ee.	*Wollaston, Mass.*	B Θ Π House
Laing, Edmond Taylor, Zo.	*Bangor*	69 Harthorn Ave., Bangor
Landon, Miriam, Py.	*Bangor*	Colvin Hall
Lane, Moses Harold, Gm.	*Mattapan, Mass.*	T E Φ House
Lannon, Frances Fern, Zo.	*Roslindale, Mass.*	29 Park Street
Laputz, Alexander Harry, Fy.	*Brooklyn, N. Y.*	Stillwater
Larrabee, Edward Whittum, Me.	*Belfast*	Φ Γ Δ House
Leavitt, Earl Edward, Fm.	*Wytopitlock*	25 Grove Street
Lees, Harry Thomas, Es.	*Manchester, Mass.*	102 H. H. Hall
Leighton, Mary Elizabeth, Hy.	*Alfred*	Balentine Hall

Lerner, Alice Mary, Es.	*Melrose, Mass.*	Stillwater Avenue, Stillwater
Levitan, Leon Bernard, Es.	*Brookline, Mass.*	Τ Ε Φ House
Lewis, Helen Baker, Eh.	*Bar Harbor*	Balentine Hall
Lewis, Joseph Henry, Ee.	*Springfield*	302 Oak Hall
Lieberman, Leo Lee, Eh.	*Bangor*	49 Parkview Avenue, Bangor
Lippa, Elmer Nathan, Es.	*Peabody, Mass.*	Τ Ε Φ House
Littlefield, Sarah Wells, He.	*Brewer*	Balentine Hall
Long, Carolyn Martha, Eh.	*Bangor*	213 Elm Street, Bangor
Lord, Dwight Elmer, Ee.	*Camden*	Φ Κ Σ House
Lord, Moses Stuart, Ch.Eng.	*Old Town*	238 Main Street, Old Town
Lovejoy, Evelyn Hayes, Ed.	*Kennebunk*	164 College Road
Loveless, Robert Morrill, Me.	*Melrose, Mass.*	202 H. H. Hall
Lowe, Charles Herman, Fy.	*Melrose, Mass.*	North Main Street
Lowe, Henry Francis, Fm.	*Brooks*	3 Park Street
Lowell, Henry True, Jr., Ee.	*Auburn*	Λ Χ Α House
Lowell, Margaret Wilson, Ed.	*Machias*	Colvin Hall
Lueders, Norma Caecelia, He.	*Marblehead, Mass.*	Balentine Hall
Lull, Sumner Hale, Ee.	*Augusta*	Σ Χ House
Lundy, Hazel Elizabeth, Ms.	*Saco*	Balentine Hall
Lynch, Thomas Elwin, Ee.	*South Portland*	Θ Χ House
Lynds, Marjorie Clara, Es.	*Kittery*	Colvin Hall
McAllister, Mabel Bessie, Ed.	*Milford*	Milford
McDonough, Martin Joseph, Jr., Eh.	*Bangor*	96 Otis Street, Bangor
McDonough, William Thomas, Ce.	*Portland*	Θ Χ House
McGinley, Raymond Powell, Pa.	*Danvers, Mass.*	Φ Γ Δ House
McGraves, Donald Esty, Ed.	*Brunswick*	41 Mill Street
McKeen, Harold Havener, Es.	*Bangor*	257 Center Street, Bangor
McKenzie, Charles Kennedy, Es.	*Augusta*	Β Θ Π House
McLaughlin, Ruth Helen, Ed.	*Washburn*	Balentine Hall
McLeary, Barbara, Ed.	*Farmington*	15 Pierce Street
Macklem, Harold George, Pa.	*Hamilton, Ohio*	Y. M. C. A., Bangor
Marr, James Archibald, Fm.	*Millinocket*	Φ Η Κ House
May, Madeleine Elizabeth, Ed.	*Brooklyn, N. Y.*	Colvin Hall
Mayhew, Mabel Eleanor, Zo.	*Old Town*	42 Stillwater Avenue, Old Town

Mayo, Donald Babson, Fy.	*Cumberland Center*	Φ K Σ House
Meade, Arland Ritchie, Dh.	*Auburn*	25 Grove Street
Merrill, Edward Osgood, Ch.	*Orono*	178 Main Street
Merrill, Wilford Jewett, Fy.	*Solon*	45 Mill Street
Miles, Evelyn Adriance, Mc.	*Orono*	54 Pine Street
Millett, Althea Hope, He.	*Norway*	Balentine Hall
Mitchell, Anna Jean, Ms.	*Bar Harbor*	Colvin Hall
Mitchell, Elizabeth Helen, He.	*Oakland*	20 Forest Avenue
Moan, Marian Jane, Ed.	*Machias*	Balentine Hall
Morse, Henry Irwin, Dh.	*Kittery*	Farm Boarding House
Morse, Roger Harry, Fy.	*Northboro, Mass.*	45 Mill Street
Mosher, Dorothy Conrey, He.	*Bangor*	89 Royal Road, Bangor
Mosher, Glenn Harold, Ag.	*North Jay*	3 Park Street
Moulton, Arthur Charles, Me.	*West Newfield*	Σ N House
Nason, Natalie Eva, Ed.	*Bangor*	South Hall
Neal, Oliver Meader, Jr., Bt.	*North Berwick*	Σ A E House
Ness, Norman Renfrew, Fm.	*Auburn*	Φ M Δ House
Newcomb, Hugh Ross, Wc.	*Newton Centre, Mass.*	A X A House
Nickerson, Archie William, Ed.	*Belfast*	Men's Infirmary
Nightingale, Lewis Alden, Eh.	*Fort Fairfield*	Σ N House
Nightingale, Philip Simeon, Fm.	*Fort Fairfield*	Φ H K House
Norris, Russell Taplin, Wc.	*Newburyport, Mass.*	A T Ω House
Olander, Paul Herbert William, Es.	*Ellsworth*	Ellsworth
Oliver, John Wesley, Ag.	*Orono*	35 Hill Street
Osgood, Carl Chapin, Me.	*Ellsworth*	Σ X House
Owens, Albert Llewellyn, Fm.	*Portland*	Φ M Δ House
Owens, Thomas William, Jr., Fm.	*Portland*	Φ H K House
Page, Leland Vernon, Ce.	*Easton*	Φ H K House
Parker, Robert George, Es.	*Sherman Mills*	Φ M Δ House
Penley, Geneva Helen, Hy. & Gt.	*Portland*	Colvin Hall
Philbrook, George Edwin, Ch.	*Tenafly, N. J.*	A T Ω House
Philpott, Lawrence Arad, Ee.	*Patten*	Φ H K House
Picard, Marguerite Mary, Rl.	*Augusta*	Colvin Hall
Pierce, Edward Wiggin, Fy.	*Portland*	Θ X House
Pillsbury, John Wallace, Ed.	*Benton Station*	College Road
Pippin, Richard Peter, Eh.	*Bar Harbor*	306 Oak Hall
Plimpton, Robert Hall, Fy.	*Newton Centre, Mass.*	Φ M Δ House

Plourde, Leonard Bradbury, Me.	*Orono*	18 Oak Street
Plummer, Lawrence Crosby, Ed.	*Damariscotta Mills*	15 Mill Street
Polito, Armando Arnaldo, Rl.	*Portland*	Θ X House
Poole, Donald Glidden, Es.	*Vinalhaven*	Σ X House
Prahar, Louis Benjamin, Fy.	*Englewood, N. J.*	Α Τ Ω House
Profita, Josephine Mary, Dr.	*Bangor*	4 Essex Street, Bangor
Rankin, Lucille Anne, He.	*Rockland*	Colvin Hall
Raye, Mary Helen, Zo.	*Eastport*	The Maples
Raymond, Gordon Byron, Ed.	*Robinson's*	Φ Κ Σ House
Raymond, Richard Watt, Pa.	*St. Albans, Vt.*	Κ Σ House
Reidman, Ernest John, Ch.Eng.	*Auburn*	112 H. H. Hall
Reiley, Helen Prince, Rl.	*Portland*	Balentine Hall
Richardson, Doris Jeanette, Ed.	*Bangor*	Balentine Hall
Rogers, Philip Norris, Fm.	*Mars Hill*	37 Park Street
Rosen, Antoria Shirley, He.	*New Sweden*	Colvin Hall
Ross, John Buchanan, Fy.	*Bridgeport, Conn.*	Α Χ Α House
Roundy, George, Fy.	*Walpole, Mass.*	Σ Α Ε House
Rowe, Catharine Lancaster, Zo.	*Bangor*	Balentine Hall
Rowe, Ernest York, Hy.	*Eliot*	12 Park Street
Rubin, Morris David, Es.	*Bangor*	55 Elm Street, Bangor
Russell, Charles Stanward, Ch.Eng.	*Stillwater*	Stillwater
Saltzman, William Clarence, Eh.	*Bangor*	303 Broadway, Bangor
Seavey, Ruthe Shirley, He.	*Cape Porpoise*	Balentine Hall
Shannon, Thomas Rae, Jr., Zo.	*Glens Falls, N. Y.*	Λ Χ Α House
Sharon, Cora Edra, Py.	*Wrentham, Mass.*	Balentine Hall
Shaw, Beulah Lilah, He.	*Freeport*	20 Forest Avenue
Shaw, George Ronald, Ed.	*South Casco*	University Cabin
Shay, Mary Regina, Eh.	*Lewiston*	Balentine Hall
Shea, Merrill Arthur, Fy.	*Wilton*	Λ Χ Α House
Sherry, Edward Chaplin, Es.	*Portland*	106 H. H. Hall
Shesong, Faith Lovejoy, Dr.	*Portland*	Balentine Hall
Shute, Harry David, Ce.	*Augusta*	Β Θ Π House
Siegel, James Howard, Zo.	*Bangor*	22 Hazel Street, Bangor
Silsby, Edward Homer, Fy.	*Bangor*	Κ Σ House
Smart, Walter Elden, Jr., Me.	*Portland*	Φ Γ Δ House
Smith, Arthur Grant, Ch.Eng.	*New Gloucester*	Φ Κ Σ House
Smith, Frances Sargent, Cl.	*South Portland*	Balentine Hall
Smith, Francis Wager, Jr., Fy.	*New Haven, Conn.*	18 Oak Street
Smith, Harry Wallace, Ed.	*Bucksport*	395 College Road

Smith, Hiram LeRoy, Jr., Ch.Eng.	*Huntington, W. Va.*	Α Τ Ω House
Smith, Louis, Py.	*Portland*	12 Park Street
Smith, William Arthur, Me.	*Dennysville*	Δ Τ Δ House
Smith, Winslow Baker, Ee.	*Springvale*	Δ Τ Δ House
Spavin, Henry Arnold, Ce.	*Brewer*	Δ Τ Δ House
Spence, Fred Albert, Ce.	*West Roxbury, Mass.*	Β Θ Π House
Stanley, James Sterling, Es.	*Hampden Highlands*	Hampden Highlands
Staples, Lawrence Sylvester, Gm.	*Bangor*	160 Essex Street, Bangor
Staples, Walter Sylvester, Ph.	*Kittery*	24 Main Street
Stevens, Joseph Ayer, Ce.	*Lincoln*	Φ Κ Σ House
Stevens, Richard Merle, Zo.	*Bangor*	67 Otis Street, Bangor
Stromberg, Edwin Knight, Ch.	*North Berwick*	Σ Α Ε House
Strout, Vincent Dickey, Ms.	*Jay*	3 Park Street
Sturgis, Frederic Sweeney, Es.	*Portland*	Κ Σ House
Sutton, Mary-Hale, He.	*West Roxbury, Mass.*	Balentine Hall
Swan, Rosa Elizabeth, He.	*Brewer*	25 Prospect Street, Brewer
Swenson, Alfred August, Me.	*Millinocket*	Stillwater
Tapley, Frank Merton, Fm.	*Robinson's*	Φ Η Κ House
Tarbell, Lester Joseph, Ch.Eng.	*Smyrna Mills*	Β Θ Π House
Taylor, Georgia Hawkes, He.	*South Portland*	Colvin Hall
Tewksbury, Edwin Fellows, Es.	*Orrington*	Orrington
Thomas, Edith Louise, Es.	*Skowhegan*	North Hall
Thompson, James Douglas, Es.	*South Bristol*	Σ Ν House
Thompson, Marjorie Evelyn, He.	*Biddeford*	Balentine Hall
Thompson, Marjorie Mason, He.	*Brewer*	10 Brimmer Street, Brewer
Thompson, Norman Herbert, Me.	*Biddeford*	Σ Α Ε House
Thompson, William Raymund, Jr., Zo.	*Caribou*	Stillwater
Timson, George Edwin, Jr., Es.	*Lynn, Mass.*	Α Τ Ω House
Toms, Robert Henry, Me.	*Portland*	Θ Χ House
Tondreau, Priscilla Anne Marie, Rl.	*Brunswick*	Balentine Hall
Tripp, Arnold Riggs, Ch.Eng.	*Gray*	Δ Τ Δ House
Troland, Edwin Parker, Me.	*Malden, Mass.*	Φ Κ Σ House
Trott, Caleb Merritt, Eh.	*Bath*	Α Τ Ω House
Tsoulas, George Louis, Es.	*Bangor*	83 Elm Street, Bangor
Vannah, Sherman, Me.	*Waldoboro*	Θ Χ House
Varney, Richard Harrison, Fm.	*Jonesboro*	College Road

Veague, Arnold Leolin, Es.	*Castine*	Φ K Σ House
Veague, William Everett, Eh.	*Harborside*	Φ K Σ House
Viner, Benjamin Fogg, Es.	*Bangor*	167 Essex Street, Bangor
Viola, Ralph Thomas, Fy.	*Orono*	Main Street
Waldron, Richard Shailer, Fy.	*Dexter*	A T Ω House
Walker, Murdoch, Es.	*Millinocket*	A T Ω House
Wanagel, Michael, Me.	*Newburyport, Mass.*	A T Ω House
Ware, Barbara Emily, He.	*South Portland*	Home Management House
Watson, Festus George, Ms.	*Portland*	Θ X House
Watson, Grace Madeline, Ed.	*Oakland*	Pine Street, Old Town
Webber, Philip Shepard, Es.	*Belfast*	41 Mill Street
Webber, William Clarence, Jr., Ed.	*Bar Harbor*	B Θ Π House
West, Randolph Hartwell, Ag.	*North Berwick*	25 Grove Street
White, Frances Jewell, He.	*Orono*	47 Mill Street
Whitmore, Rose Frances, Rl.	*Rockland*	Balentine Hall
Willey, James Frederick, Fy.	*St. Johnsbury, Vt.*	Θ X House
Williams, John Perkins, Hy.	*Ogunquit*	Λ X A House
Williams, Richard Eaton, En.	*Framingham Center, Mass.*	A T Ω House
Williston, Margaret Ruth, Eh.	*Bangor*	264 French Street, Bangor
Witherspoon, Donald Francis, Fy.	*North Haven*	80 North Main Street
Wood, Margaret Crosskill, Ed.	*Presque Isle*	Colvin Hall
Woodland, Edwin Conrad, Dt.	*Watertown, Mass.*	K Σ House
Woods, Paul Campbell, Eh.	*Newton Centre, Mass.*	Δ T Δ House
Wright, Mary Louise, He.	*Falmouth Foreside*	South Hall
Yeaton, George William, Hy.	*Farmington*	11 Main Street
Young, Kenneth Bradford, Ce.	*Sherman Mills*	Φ H K House
Zoidis, Peter, Es.	*Bangor*	125 Grove Street, Bangor

JUNIORS

Albert, Paul Aurele, Bc.	*Presque Isle*	24 Main Street
Alley, John Chase, Fy.	*Portland*	Φ H K House
Ames, Bertram Wendell, Ph.	*Bangor*	106 Highland Street, Bangor

Anderson, Anna Mirdza, Eh.	*Derby*	Balentine Hall
Anderson, Evangeline Deborah, Es.	*Monson*	Colvin Hall
Archibald, Mary Cordelia, Py.	*Houlton*	Colvin Hall
Armstrong, Alma May, Rl.	*Portland*	15 Pierce Street
Bailey, Cora Alice, Zo.	*Waterville*	South Hall
Baker, Gwendolyn Marie, He.	*Brewer*	29 Brimmer Street, Brewer
Baker, Robert Loveland, Hy.	*Cape Cottage*	Φ Γ Δ House
Barker, Thomas Levi, An.	*Vassalboro*	308 H. H. Hall
Bartlett, Ann Quincy, Ch.A.	*Sorrento*	Balentine Hall
Barton, Ruth Estelle, He.	*West Gray*	Balentine Hall
Bates, Arthur Kenneth, Zo.	*Orono*	62 Main Street
Bearce, Mary Leslie, Es.	*Bucksport*	Balentine Hall
Bell, Eleanor Lucille, He.	*Albany, N. Y.*	Balentine Hall
Bettoney, Wilfred Estey, Me.	*Wollaston, Mass.*	36 College Road
Blackwell, Ruel Jotham, Ce.	*Madison*	Φ M Δ House
Blake, Howard Francis, Me.	*Portland*	Θ X House
Blanchard, Charles Louis, Ch.	*Bangor*	48 Montgomery Street, Bangor
Bond, Helen Marden, Py.	*Bangor*	Balentine Hall
Bourgoin, Louis Joseph, Ed.	*Frenchville*	28 Main Street
Bradford, Merrill Ray, Hy. & Gt.	*Bangor*	Φ Γ Δ House
Bramhall, Robert Billings, Me.	*Quincy, Mass.*	B Θ Π House
Brann, Leonard Maurice, Bc.	*North Whitefield*	College Road
Brastow, Vera Estelle, He.	*Brewer*	Balentine Hall
Browne, Paul Everett, Fm.	*Bethel*	Φ M Δ House
Buck, Embert Clason, Ag.	*Harrison*	25 Grove Street
Bucklin, Dunbar Richard, Fy.	*South Warren*	Φ K Σ House
Burke, Virginia, He.	*Hanson, Mass.*	Balentine Hall
Burns, John Wesley, Ph.	*Union*	Kell Street
Buzzell, Mary Edith, He.	*Fryeburg*	Colvin Hall
Byer, Edwin, Zo.	*Bangor*	36 Essex Street, Bangor
Cahill, James Best, Fy.	*Haworth, N. J.*	K Σ House
Cail, Robert Small, Zo.	*Portland*	26 Peters Street
Cameron, John Robert, Ce.	*Newport, N. H.*	Λ X A House
Campbell, Josephine O'Brien, Zo.	*Machias*	Balentine Hall
Cassidy, Margaret Eileen, Ed.	*Bangor*	363 State Street, Bangor
Cates, Ethel Maxine, He.	*Thorndike*	Balentine Hall
Chamberlain, Austin Hunter, Me.	*Mt. Vernon, N. Y.*	Φ Γ Δ House
Chapman, Gordon Lewis, Fy.	*Portland*	Θ X House

Chase, Eva Isobel, Eh.	*Limestone*	Balentine Hall
Chick, Arthur Jesse, Jr., Ht.	*Monmouth*	Φ M Δ House
Chute, Laura Grace, He.	*Brewer*	Balentine Hall
Ciomei, Lawrence Rizzier, Ch.Eng.	*Stonington*	A T Ω House
Clark, Carleton Hermon, Ee.	*Springfield, Mass.*	Σ N House
Clark, Kenneth Edward, Fm.	*Fort Fairfield*	Φ H K House
Clement, Roger Conant, Dh.	*Monroe*	A Γ P House
Clifford, William Foster, Es.	*Westmount, Que., Canada*	A T Ω House
Cohen, Edward Eugene, Es.	*Bangor*	311 French Street, Bangor
Collins, Frank Henry, Me.	*Bar Harbor*	39 Pine Street
Cook, Robert Boone, Fy.	*Presque Isle*	A T Ω House
Cooper, Erwin Elling, Gt.	*Mattapan, Mass.*	T E Φ House
Cooper, Mary Eliza, Hy.	*Albion*	Colvin Hall
Corbett, Barbara, He.	*Orono*	Campus
Corrigan, Philip Aiken, Ch.Eng.	*Calais*	Θ X House
Costrell, Louis Charles, Ee.	*Bangor*	233 Parkview Avenue, Bangor
Cousins, Eleanor Allbee, Ed.	*East Blue Hill*	South Hall
Cox, Catherine Ella, He.	*Sea Cliff, N. Y.*	Balentine Hall
Crabtree, Kenneth Lester, Me.	*Union*	Kell Street
Craig, Philip Charles, Fm.	*Bangor*	103 Mill Street
Craig, William Henry, Fy.	*Bingham*	18 Forest Avenue
Cramer, Francis Leroy, Ce.	*Bristol*	Λ X A House
Cressy, Carlton Clark, Es.	*Millinocket*	52 North Main Street
Crocker, Richard Foster, Jr., Wc.	*Fort Kent*	A T Ω House
Croteau, Dearnley, Es.	*Lisbon Falls*	384 College Road
Crowell, Samuel, III, Me.	*Marblehead, Mass.*	384 College Road
Cullinan, Robert Vincent, Zo.	*South Portland*	Φ Γ Δ House
Cunningham, James W., Me.	*Old Town*	36 Veazie Street, Old Town
Curran, Dennis Joseph, Gm.	*Bangor*	101 Fern Street, Bangor
Curran, Hazel Bernice, He.	*Milo*	Balentine Hall
Currie, Charlotte Hope, Cl.	*Hartland*	Balentine Hall
Currie, Eleanor Frances, Ed.	*Hartland*	South Hall
Currier, Doris Madeline, Ed.	*Oxbow*	Colvin Hall
Curtin, Timothy Francis, Fm.	*Boothbay Harbor*	28 Main Street
Curtis, Elizabeth, He.	*Searsport*	Balentine Hall
Cyr, Edward Peter, Ag.	*Lille*	28 Main Street

Daigle, Clifford Lewellyn, Ed.	*Fort Kent*	12 Park Street
Daigle, Marie Anne, Ed.	*Fort Kent*	87 Main Street
Davee, Pauline Weltha, Es.	*Orono*	46 College Road
Davis, Carl Fremont, Jr., Me.	*Rumford*	K Σ House
Davis, Dorothy, He.	*Longmeadow, Mass.*	Balentine Hall
Davis, Marguerite Alma, Es.	*Old Town*	Colvin Hall
Day, Elroy Kenneth, Ce.	*North Berwick*	Σ A E House
Dean, Buel David, Pa.	*Pittsfield, Mass.*	Φ Γ Δ House
Dean, Orris Lee, Jr., Ch.	*Derby*	2 Myrtle Street
Dean, Philena Emily, He.	*Waterville*	Balentine Hall
Demont, Ralph Lewis, Fy.	*Old Town*	33 Oak Street, Old Town
Dimitre, Charlotte Louise, He.	*Calais*	Balentine Hall
Dixon, Elizabeth Rachel, Es.	*Old Town*	29 South Fourth Street, Old Town
Doak, Carleton, Jr., Ce.	*Belfast*	Φ Γ Δ House
Dodge, Harland Laurell, Es.	*Hudson Falls, N. Y.*	Λ X A House
Doe, George Edward, Fy.	*Kezar Falls*	7 Forest Avenue
Doe, Robert Wendell, Pa.	*Bingham*	Φ M Δ House
Drew, Dana Edgecomb, Fm.	*Patten*	Commons
Dunbar, Marion Phoebe, He.	*Belfast*	Balentine Hall
Dyer, Allen Lyford, Py.	*Camden*	Δ T Δ House
Dyer, Hamilton Higgins, Jr., Me.	*Kennebunk*	Φ Γ Δ House
Dyer, Harold Jacobson, Wc.	*Portland*	Σ A E House
Dyson, Albert Orne, Pa.	*Stoneham, Mass.*	Σ X House
Edwards, John Sherwood, Dh.	*Bridgeport, Conn.*	Φ Η K House
Ela, Benjamin Walter, Jr., Ch.Eng.	*North Anson*	Σ N House
Epstein, Lucille Mae, Hy. & Gt.	*Bangor*	298 Essex Street, Bangor
Ernst, Morris Alonzo, Ce.	*York Village*	A T Ω House
Estabrook, Harold Udell, Es.	*Calais*	Σ X House
Fales, Joan Elinor, Py.	*Waterville*	Balentine Hall
Farrin, Afton Holmes, Ht.	*South Bristol*	45 Mill Street
Farris, Robert Calvin, Jr., Ag.	*Union*	A Γ P House
Feero, Robert Clyde, Ch.	*Bath*	A T Ω House
Fitch, Bula Louise, He.	*Orono*	32 College Road
Fitch, Harlan Pratt, Fy.	*Groton, Mass.*	Stillwater
Fogg, Lucille Carroll, Rl.	*Bangor*	Balentine Hall
Folsom, Marie Theresa, He.	*Orono*	63 Forest Avenue

Folsom, Phillips Emery, Eh.	*Biddeford*	Κ Σ House
Friedman, Albert, Es.	*Bangor*	173 Broadway, Bangor
Gale, Eunice Marianne, Ms.	*Falmouth*	Balentine Hall
Gamage, Russell Wells, Me.	*Christmas Cove*	Δ Τ Δ House
Gleason, Lawrence John, Ce.	*Bangor*	95 Otis Street, Bangor
Goodrich, Maison Keith, Fm.	*Patten*	Α Τ Ω House
Goud, Allan Frederick, Es.	*Van Buren*	Θ Χ House
Grace, Barbara, He.	*Lynnfield Center, Mass.*	Balentine Hall
Grange, Jean Isabelle, He.	*Smyrna Mills*	Balentine Hall
Grant, Philip Farnsworth, Fy.	*Cherryfield*	Σ Χ House
Grant, Theodore Hudson, Ee.	*Houlton*	83 Park Street
Green, Sybil Kent, Eh.	*Orono*	Balentine Hall
Gregory, Ruth Evelyn, Ed.	*Rockland*	33 Bennoch Street
Groves, Stephen William, Me.	*East Millinocket*	Φ Μ Δ House
Grundy, Walton Earle, By.	*Auburn*	Α Γ Ρ House
Hall, Norman Charles, Ed.	*Dalton, Mass.*	25 Myrtle Street
Hall, Thomas William, Fm.	*Wiscasset*	Φ Μ Δ House
Halliday, Harry Horn, Fy.	*Newtonville, Mass.*	Α Χ Α House
Hannigan, Bernard Guy, Fm.	*Houlton*	Α Τ Ω House
Harnden, Frederick Barker, Me.	*Rangeley*	Κ Σ House
Harriman, John Philip, Ee.	*Cherryfield*	Σ Χ House
Harris, Robert Tyler, Es.	*Salem, Mass.*	Κ Σ House
Harrison, Edna Louise, He.	*Newburgh, N. Y.*	Balentine Hall
Hart, Elmer Colburn, Fy.	*South Hope*	College Road
Haskell, Donald Benjamin, Me.	*Portland*	University Cabin
Haskell, Priscilla Day, Eh.	*Wiscasset*	13 Pond Street
Hayes, Edward Keith, Zo.	*Orono*	Φ Κ Σ House
Haynes, Mildred Hamlin, Hy.	*South Waterford*	17 Spencer Street
Hedstrom, John Ephraim, Es.	*Bangor*	288 Union Street, Bangor
Hemingway, Robert Edward, Ag.	*Presque Isle*	Φ Η Κ House
Hennessy, Charlotte Rose, He.	*Portland*	Balentine Hall
Henry, Mary Elizabeth, He.	*Thomaston*	North Hall
Higgins, Foster L., Jr., Zo.	*Ellsworth*	Φ Κ Σ House
Higgins, Ralph M., Zo.	*Ellsworth*	Φ Κ Σ House
Hill, Charles St. John, Me.	*Orono*	9 Kell Street
Hilton, William Rogers, Ce.	*Bangor*	Φ Κ Σ House
Hines, Dorothy Mildred, Hy.	*Middletown, Conn.*	Balentine Hall
Hodgdon, Kendrick Yale, Bt.	*Anson*	University Cabin

Holbrook, Charles Marsh, Ce.	*Watertown, Mass.*	395 College Road
Holmes, Richard, Fy.	*Northeast Harbor*	Β Θ Π House
Homans, Elizabeth West, He.	*Bangor*	Balentine Hall
Hopkins, Richard Carver, Ce.	*Camden*	Δ Τ Δ House
Howard, Richard Homer, Fm.	*Sangerville*	Σ Χ House
Howard, Sheldon Kenneth, Me.	*North Monmouth*	University Cabin
Hoxie, Margaret Leonora, Py.	*Belfast*	Balentine Hall
Huff, Margaret Louise, He.	*Biddeford*	South Hall
Huntoon, Charles Rounds, Jr., Pa.	*Rumford*	Δ Τ Δ House
Jellison, Milton Sylvester, Es.	*Bangor*	279 Essex Street, Bangor
Johnson, Theresa Evelyn, Rl.	*South Portland*	17 Spencer Street
Jones, Chester Warren, Ce.	*Canaan*	25 Grove Street
King, Charlotte Edith, Eh.	*Bath*	Balentine Hall
Kirkland, Robert, Jr., Ee.	*Quincy, Mass.*	Β Θ Π House
Kirkpatrick, Alan Fred, Ch.	*Old Orchard Beach*	430 College Road
Kiszonak, Marion Margaret, He.	*Lisbon Falls*	Balentine Hall
Knotts, Elizabeth McCoy, Zo.	*Portland*	Balentine Hall
Konecki, Leon Walter, Es.	*South Portland*	Σ Χ House
Kufel, Stacia Victoria, He.	*Shirley, Mass.*	South Hall
Kuney, Clark Glanis, Eh.	*Boston, Mass.*	Β Θ Π House
Kyer, Marguerite Edith, Py.	*Brewer*	236 Wilson Street, Brewer
Ladd, Edward Rankin, Py.	*Rockland*	Κ Σ House
Lamoreau, Jeanette, Ms.	*Presque Isle*	South Hall
Lancaster, Alden, Es.	*Presque Isle*	Δ Τ Ω House
Lanigan, Edwin James, Ch.A.	*Belmont, Mass.*	24 Oak Street
Leavitt, Lois Priscilla, He.	*Orono*	7 Park Street
Leighton, Berenice Maude, Ms.	*Harrington*	Balentine Hall
Leonard, Herbert Arthur, Dt.	*Thorndike*	Φ Κ Σ House
Lippke, Arthur John, Jr., Fy.	*Jamaica, N. Y.*	Λ Χ Α House
Lovering, Francis Ward, Py.	*Tyngsboro, Mass.*	26 Peters Street
Lunt, Ferne Marguerite, Eh.	*Houlton*	Colvin Hall
McCarthy, William Edward, Fm.	*Rumford*	Κ Σ House
McCully, Helen Clarissa, Ed.	*Farmington*	South Hall
MacDonald, Reginald Peppard, Me.	*Lynn, Mass.*	Β Θ Π House
McKenzie, Melvin Almon, Me.	*Lewiston*	412 H. H. Hall

Malcolm, Leon Tibbetts, Ed.	*Augusta*	59 Park Street
Mallet, Alfred Parker, Ms.	*South Portland*	Φ Γ Δ House
Marston, Merwin Abbott, Wc.	*East Waterford*	Φ M Δ House
Merrill, Leonard Carleton, Es.	*Brewer*	R. D. #6, Brewer
Mersereau, Clayton Davis, Es.	*Sebago Lake*	Σ N House
Miller, Anita Elinor, Eh.	*Monmouth Beach, N. J.*	Balentine Hall
Miller, Roy Leighton, Fy.	*Quincy, Mass.*	Λ X A House
Millett, Elwood Dimock, Me.	*Norway*	Φ M Δ House
Milliken, Sewall Otis, Fm.	*Portland*	3 Park Street
Milliken, Wendall Seavey, Fm.	*Portland*	3 Park Street
Mitchell, Lillian Mae, Py.	*Orono*	14 Park Street
Monroe, Richard Anderson, Fy.	*Melrose, Mass.*	B Θ Π House
Moore, Donald James, Es.	*Bangor*	Σ A E House
Morong, Raymond Lee, Ee.	*Madison*	Σ N House
Moulton, Marjorie Gloria, Rl.	*Randolph*	Balentine Hall
Moynihan, Julia Ruth, He.	*Madison*	Balentine Hall
Murphy, Gerald Eugene, Pa.	*Portland*	K Σ House
Murray, William Lawrence, Fy.	*Orono*	212 Main Street
Nason, Beverly Ross, Ch.	*Old Town*	291 South Main Street, Old Town
Nason, Everett Herrick, Ed.	*Brunswick*	60 Park Street
Nelson, Eunice Josephine, Es.	*Old Town*	South Hall
Nelson, Raymond Lloyd, Fy.	*Concord, Mass.*	Σ X House
Norton, Raymond Francis, Es.	*Bangor*	24 Buck Street, Bangor
Norton, Weston Pike, Wc.	*Strong*	24 Main Street
Ohnesorge, Louise Maxine, Eh.	*Kennebunkport*	Colvin Hall
Orr, Mary Josephine, Eh.	*Old Town*	202 North Brunswick Street, Old Town
Orser, Margaret Rowen, Eh.	*Fort Fairfield*	Balentine Hall
Pagan, Ruth Alta, Hy. & Gt.	*Claremont, N. H.*	Balentine Hall
Page, William Birney, Ce.	*Sebago Lake*	8 Kell Street
Parkman, Ethelyn Arlene, He.	*Lynn, Mass.*	Colvin Hall
Parkman, Lauress Tibbetts, Me.	*Lynn, Mass.*	312 Oak Hall
Patrinelis, Charles Speros, Eh.	*Portland*	Θ X House
Patterson, Arthur Willis, Jr., Eh.	*Castine*	Σ A E House

Patterson, Frederick Gillis, Eh.	*Castine*	Σ A E House
Pendleton, Brian, Eh.	*Lewiston*	Φ M Δ House
Perrin, Donald Herbert, Fm.	*Sherman Mills*	Φ H K House
Perry, John William, Es.	*Old Town*	Φ M Δ House
Phair, Willis Ralph, Fy.	*Limestone*	10 Free Street, Stillwater
Philbrook, Helen Marion, He.	*Shelburne, N. H.*	Balentine Hall
Pierce, Alice, Eh.	*Lunenburg, Mass.*	Colvin Hall
Pinkham, Thomas Sears, Jr., Es.	*Fort Kent*	Σ N House
Porter, Phyllis Jean, He.	*Houlton*	Colvin Hall
Pratt, Elbert Sewall, Zo.	*Livermore Falls*	59 College Road
Pratt, Leonard Melvin, Ce.	*Greenville Junction*	Δ T Ω House
Quigley, Richard, Fy.	*Providence, R. I.*	B Θ Π House
Ramsdell, Ellis McNevin, Es.	*Rockland*	Σ X House
Ranco, Sadie Theresa, He.	*Old Town*	Indian Island, Old Town
Raye, Alexander Hinds, Me.	*Eastport*	80 North Main Street
Raye, John Franklin, Me.	*Eastport*	80 North Main Street
Reed, Earle Duncan, Me.	*Augusta*	Φ K Σ House
Reid, Elizabeth Hunt, He.	*Augusta*	Balentine Hall
Rice, Margaret Louise, Eh.	*Orono*	16 Mill Street
Rich, Franklin Wilson, Dh.	*Charleston*	25 Grove Street
Rich, Robert Davis, Es.	*Portland*	Σ N House
Robbins, Arthur William, Fm.	*Gouldsboro*	25 Grove Street
Robbins, Bernard Clarence, Bc.	*Gardiner*	302 H. H. Hall
Roberts, Marian Emerson, He.	*Biddeford*	Balentine Hall
Rodgers, Newton Jennings, Ch.Eng.	*Portland*	Θ X House
Russell, Louis Reid, Hy. & Gt.	*Fort Fairfield*	12 Park Street
Saex, Irving Gilbert, Es.	*Holyoke, Mass.*	14 Park Street
Sanborn, Jean Cummings, He.	*Bangor*	Balentine Hall
Sanborn, Jeannette Winter, Cl.	*Bangor*	Balentine Hall
Sanborn, Ralph Durell, Me.	*Palmer, Mass.*	384 College Road
Sawyer, George Roberts, Ce.	*Old Town*	23 Bradbury Street, Old Town
Sheraton, Robert Leonard, Me.	*West Newton, Mass.*	Θ X House
Silver, Dorothy, Py.	*Bangor*	R.F.D. #7, Bangor
Sirois, William Joseph, Ag.	*Fort Fairfield*	K Σ House
Skinner, DeWitt, Fy.	*Newtonville, Mass.*	Λ X A House

Small, Gerald Turner, Es.	*Bangor*	18 Elizabeth Avenue, Bangor
Smith, Clement Harold, Dh.	*Monmouth*	Α Γ Ρ House
Smith, Mark Sheldon, Ee.	*Bangor*	16 Bower Street, Bangor
Smith, Merton Leverne, Ed.	*Bucksport*	Bucksport
Smith, Wendell Walker, Ag.	*Presque Isle*	66 Park Street
Smith, Winfield Clinton, Ee.	*Richmond, Va.*	Σ Ν House
Speirs, Ernest Lincoln, Es.	*Westbrook*	Λ Χ Α House
Spencer, Arlo Norman, Fy.	*Bradley*	Bradley
Sprowl, Leander Mayford, Ag.	*Searsmont*	Φ Η Κ House
Stacy, Dora Louise, Es.	*Shirley*	Balentine Hall
Stacy, Madge Elizabeth, Es.	*Shirley*	Balentine Hall
Stanley, Edward Carpenter, Es.	*Rockville Centre, N. Y.*	Φ Γ Δ House
Staples, Stanley Wordsworth, Zo.	*Bangor*	160 Essex Street, Bangor
Stetson, Frederic Hastings, Ee.	*Bangor*	24 Grove Street, Bangor
Stevens, Deborah Florence, He.	*Turner*	20 Forest Avenue
Stevens, Edith Harriet, Eh.	*Pleasant Point*	Balentine Hall
Stewart, Harriette Dalrymple, Py.	*Waterville*	Balentine Hall
Stinchfield, Roger Maxim, By.	*Wayne*	Λ Χ Α House
Stinchfield, Venora Mary, Ed.	*Clinton*	South Hall
Stockholm, Harold Yager, Fy.	*Poughkeepsie, N. Y.*	Φ Κ Σ House
Stoddard, James Merrill, Fy.	*Eastport*	80 North Main Street
St. Pierre, Janet Whiting, He.	*Bangor*	8 Hudson Street, Bangor
Strout, Donald Francis, Fy.	*Jay*	3 Park Street
Szaniawski, Edward William, Fy.	*Scarsdale, N. Y.*	Α Τ Ω House
Taylor, Marjorie, Ms.	*Bangor*	Colvin Hall
Temple, George Leonard, Zo.	*Lewiston*	Σ Α Ε House
Temple, Philip Roswell, Hy. & Gt.	*Hopedale, Mass.*	Σ Α Ε House
Thomas, George Merrill, Ce.	*Rumford*	Φ Γ Δ House
Thomas, Herrick Melvin, Zo.	*Maplewood, N. J.*	Σ Χ House
Thomas, Richard Earl, Fy.	*Rockland*	Κ Σ House
Thurston, Frederick Clark, Eh.	*Bangor*	276 Essex Street, Bangor
Tibbetts, Earle Wilbur, Ce.	*Hallowell*	Δ Τ Δ House
Titcomb, Stanley Thayer, Ch.	*New Gloucester*	Φ Κ Σ House
Tolman, Marthon Gregory, Es.	*Portland*	Σ Χ House
Toner, Albert Plummer, Eh.	*Lewiston*	Σ Α Ε House
Toothaker, Carl Russell, Me.	*Gardiner*	Δ Τ Δ House
Trafford, David White, Hy. & Gt.	*Portland*	64 Division Street, Bangor
True, Katherine King, Ed.	*Hope*	South Hall
Turner, Harland Glidden, Zo.	*Augusta*	Β Θ Π House

Vail, Dorothea Agnes, Py.	*Cornwall-on-Hudson, N. Y.*	South Hall
Verrill, Thomas Davis, Me.	*Westbrook*	402 H. H. Hall
Walton, Mildred Hayes, Py.	*Lisbon*	Balentine Hall
Ward, Sheldon Leroy, Dt.	*Thorndike*	3 Park Street
Ward, William Howard, Ce.	*North Uxbridge, Mass.*	A T Ω House
Washburn, Frank Johnson, Dh.	*Dover-Foxcroft*	3 Park Street
Weatherbee, Artemus Edwin, Hy. & Gt.	*Bangor*	Β Θ Π House
Wenger, Karl Frederick, Fy.	*Springfield, Mass.*	17 Margin Street
Wentworth, Owen, Es.	*Kennebunkport*	Β Θ Π House
West, Paige Lamb, Zo.	*Portland*	Σ Α Ε House
White, Audrey Juanita, Eh.	*South Portland*	South Hall
Whiteley, Albert Harry, Fy.	*Limerick*	18 Forest Avenue
Whitney, John Franklin, Ch.	*Presque Isle*	35 Bradbury Street, Old Town
Whittredge, Barbara Fern, Es.	*Ansonia, Conn.*	Balentine Hall
Williams, Thomas Arthur, Ee.	*Springfield, Mass.*	Σ Χ House
Wing, Merle Wesley, En.	*Old Town*	35 Bradbury Street, Old Town
Winslow, Paul Howard, Ee.	*Millinocket*	Σ Ν House
Wong, Helen Elizabeth, Ed.	*Bangor*	Balentine Hall
Wood, Amy Sheppard, He.	*Old Town*	19 North Brunswick Street, Old Town
Yozukevich, Algird George, Me.	*Auburn*	Α Τ Ω House

SOPHOMORES

Adams, Edna Pearl, Arts	*South Brewer*	412 South Main Street, South Brewer
Adams, Norris Stanwood, Arts	*Portland*	University Cabin
Adkins, Harlow Dailey, Me.	*Norway*	Α Τ Ω House
Akeley, Richard Warren, Fm.	*Presque Isle*	Φ Η Κ House

Albee, Burton Hathaway, Me.	*West Roxbury, Mass.*	395 College Road
Alpert, Myer, Arts	*Bangor*	137 State Street, Bangor
Andrews, Robert Golden, Arts	*Gardner, Mass.*	University Cabin
Andrews, Roger Stover, Arts	*Augusta*	Σ X House
Arthur, Garfield Manning, Ee.	*Fitchburg, Mass.*	Β Θ Π House
Ashby, James Hanlon, Fm.	*Caribou*	Φ Η Κ House
Atwood, Robert Dixon, Arts	*Portland*	Σ X House
Babcock, Philip Borden, Arts	*Castine*	Σ Α Ε House
Bacon, Earl Grant, Me.	*Oakland*	25 Grove Street
Bahrt, Albert Edgar, Ge.	*St. Johnsbury, Vt.*	Σ Α Ε House
Barrell, William Dwight, Fm.	*Turner*	Σ Α Ε House
Barstow, Virginia Lucille, Arts	*Brewer*	52 Chamberlain Street, Brewer
Bean, Perry Ashley, Ce.	*Bangor*	41 Mill Street
Bearce, Neil Robert, Ht.	*Foxboro, Mass.*	Β Θ Π House
Beardsell, Wallace Ames, Pa.	*Boston, Mass.*	Κ Σ House
Beck, William Alfred, Bc.	*Bangor*	Δ Τ Δ House
Beckerman, Frank Maurice, Arts	*Brookline, Mass.*	12 Pleasant Street
Bell, George Louis, Fm.	*Bangor*	25 Hudson Street, Bangor
Bell, John Bemis, Arts	*Bangor*	104 Otis Street, Bangor
Berce, Woodbury Lee, Jr., Fm.	*Washburn*	Φ Η Κ House
Bessey, Earle Dutton, Jr., Fy.	*Brooks*	Φ Η Κ House
Bickford, Priscilla Hope, Arts	*Portland*	Balentine Hall
Bigelson, Rose, Arts	*Bangor*	142 York Street, Bangor
Bither, Donald Elmer, Ce.	*Linneus*	102 Mill Street
Blake, Gordon Robert, Ce.	*Brownfield*	College Road
Blake, Janet Emily, He.	*LaGrange*	36 College Road
Bohnson, Richard Joseph, Arts	*Portland*	Λ Χ Α House
Bolan, John Everett, Arts	*Winterport*	University Cabin
Bond, Henry Raymond, Ee.	*Jefferson*	Β Θ Π House
Bonney, Robert Harlan, Ge.	*Portland*	University Cabin
Bouchard, Albert James, Ag.	*Caribou*	Δ Τ Δ House
Bouchard, Kenneth Joseph, Fm.	*Caribou*	Δ Τ Δ House
Bower, William Sumner, Me.	*Auburn*	Δ Τ Δ House
Brann, Edward Kenneth, Fy.	*Plainfield, N. J.*	Δ Τ Δ House
Brann, Harriet Robie, He.	*Gorham*	College Road
Breton, Leon Joseph, Ch.Eng.	*Rumford*	Κ Σ House
Bridges, Alton George, Ag.	*Mars Hill*	Φ Η Κ House
Bronsdon, Harold Clark, Fy.	*Newton Centre, Mass.*	Λ Χ Α House

Brooks, William King, Fm.	*Falmouth Foreside*	22 Pond Street
Brudno, Lincoln, Arts	*Cleveland Heights, Ohio*	34 Pine Street
Buck, Mary Ellen, He.	*Monticello*	North Hall
Bucklin, Fred Robert, Wc.	*South Warren*	Φ K Σ House
Bull, Floyd Leland, Ag.	*Presque Isle*	Φ H K House
Burke, Gerard James, Fy.	*Concord, Mass.*	Σ X House
Burleigh, Robert Wentworth, Me.	*Boothbay Harbor*	A T Ω House
Burney, Lawrence Edward, Fy.	*South Portland*	77 Mill Street
Burr, Kenneth George, Ht.	*Kennebunk*	Φ H K House
Buss, Frank Joseph, Fy.	*Central Falls, R. I.*	47 Mill Street
Butler, Lyle Alton, Jr., Ch.Eng.	*Gardiner*	Δ T Δ House
Byram, Harry Melcher, Jr., Ee.	*Freeport*	86 Mill Street
Calderwood, Carolyn Frances, He.	*Vinalhaven*	Balentine Hall
Calvo, Raymond John, Ht.	*New York, N. Y.*	22 Pond Street
Caouette, Daniel Joseph, Arts	*Skowhegan*	A T Ω House
Carlisle, John Davis, Arts	*Bangor*	Φ Γ Δ House
Carlson, Earl David, Arts	*West Newton, Mass.*	B Θ Π House
Carr, Douglas Harold, Me.	*Dexter*	A T Ω House
Carter, Gordon Palmer, Ch.Eng.	*Brewer*	12 Brimmer Street, Brewer
Cartier, Arthur Theodore, Arts	*Fall River, Mass.*	Σ N House
Chamberlain, Everett Bacon, Fy.	*Belgrade Lakes*	A T Ω House
Chandler, Theodore Pinkham, Ch.Eng.	*South Paris*	25 Grove Street
Chandler, William Heywood, Ge.	*Portland*	Σ X House
Charpentier, Allyn Eugene, Me.	*Flushing, N. Y.*	Σ N House
Checchi, Vincent Victor, Arts	*Calais*	Θ X House
Cheney, Margaret Laurie, Arts	*Monmouth*	Colvin Hall
Citrin, Murray Maurice, Arts	*Portland*	12 Pleasant Street
Clark, Carl Orison, Fm.	*Freedom*	25 Grove Street
Clement, James Donald, Jr., Arts	*Bangor*	77 Essex Street, Bangor
Clough, Charles Henry, Jr., Me.	*West Roxbury, Mass.*	Σ X House
Coffee, Marjorie Eleanor, He.	*Clayville, N. Y.*	The Elms
Coffin, Robert Tristram, Arts	*Brunswick*	A T Ω House
Cogswell, Fred Melville, Jr., Arts	*Danvers, Mass.*	Φ Γ Δ House
Cohen, Bernard, Me.	*Biddeford*	T E Φ House
Collett, Janet, Arts	*Brewer*	Balentine Hall
Condon, James Stevens, Me.	*South Brooksville*	12 Park Street
Connolly, James Joseph, Arts	*Portland*	Θ X House
Cook, Edward Jay, Jr., An.	*Rutland, Vt.*	A T Ω House
Cook, Frances Dudley, He.	*Mapleton*	50 Forest Avenue

Cook, William Sherwood, Me.	*Tenants Harbor*	Φ M Δ House
Cooper, Mary France, He.	*Beverly Farms, Mass.*	Balentine Hall
Copeland, William Henning, Pa.	*Montreal, Que., Canada*	52 North Main Street
Cotting, Roger, Arts	*Newton, Mass.*	B Θ Π House
Covell, Priscilla Ann, Arts	*Monmouth*	Bennoch Street
Craig, Robert Elmer, Ag.	*Westfield*	25 Grove Street
Crosby, Bradford Lawrence, An.	*Belfast*	25 Grove Street
Curran, Mary Cecilia, He.	*Lewiston*	South Hall
Currier, Stuart Lavers, Fy.	*Sandwich, Mass.*	Σ N House
Curtis, Philip Edward, Fm.	*Caribou*	Φ M Δ House
Cuzner, Wilbur Leonard, Arts	*Belfast*	Φ K Σ House
Dalrymple, Stewart Willard, Me.	*Newton Centre, Mass.*	A X A House
Danforth, Hazen Willis, Ht.	*Brewer*	Σ A E House
Danforth, Norman Lewis, Ee.	*Bucksport*	A X A House
Day, Dorothy, Arts	*Orono*	203 Main Street
Deering, Marjorie Bowman, He.	*Orono*	160 College Road
Deixel, Royal Jacob, Arts	*Newark, N. J.*	12 Park Street
Dennis, Clarence Elmer, Ce.	*Rumford*	Φ K Σ House
Dequine, John Frederick, Wc.	*Long Branch, N. J.*	A T Ω House
Derry, John Harry, Ch.Eng.	*Rumford*	K Σ House
Desjardins, Ruth Ursula, He.	*Old Town*	122 South Brunswick Street, Old Town
Digby, George Tabor, Fy.	*Collingswood, N. J.*	Φ Γ Δ House
Dimick, William Carl, Wc.	*New Haven, Conn.*	7 Forest Avenue
Doak, Camilla, He.	*Belfast*	Colvin Hall
Doble, Elisabeth Jean, Arts	*Beverly, Mass.*	Balentine Hall
Donovan, Alice Ann, Arts	*Houlton*	Colvin Hall
Dore, Guy Frederick, Fy.	*Monson*	Σ N House
Dow, Dorrice Helen, He.	*Bangor*	273 Pine Street, Bangor
Duby, Carleton Paul, Fy.	*Bradley*	Bradley
Duplisse, Kathleen Esther, Arts	*Old Town*	156 Stillwater Avenue, Old Town
Dyer, Jane, Arts	*Framingham, Mass.*	Balentine Hall
Dyer, Richard Charles, Fm.	*Portland*	Σ A E House
Dyke, Ronald Arno, Me.	*Livermore Falls*	Σ A E House

Ebbeson, Helma Katrina, Arts	*Bangor*	South Hall
Ellis, Ernest, Arts	*Orono*	29 Park Street
Emery, Mark Peter, Jr., Ch.Eng.	*Bangor*	44 Boutelle Road, Bangor
Enman, Edgar Ellis, Ee.	*Bangor*	64 West Broadway, Bangor
Erickson, Miriam Orvokki, Arts	*North Cushing*	Balentine Hall
Eveleth, Lawrence Nathaniel, Ag.	*Auburn*	Stillwater
Farrar, Herbert Wendell, Ee.	*Hingham, Mass.*	Α Τ Ω House
Fay, Norman Frederick, Arts	*Needham, Mass.*	Κ Σ House
Fessenden, Ruth Natalie, Arts	*Portland*	South Hall
Files, Maynard Whitney, Fy.	*Portland*	Φ Κ Σ House
Finks, Marcia Jannette, He.	*Portland*	Balentine Hall
Finnigan, William Joseph, Me.	*New Haven, Conn.*	Δ Τ Δ House
Fisher, George Norton, Me.	*Wakefield, Mass.*	36 College Road
FitzGerald, Marion Hannah, Arts	*Newburgh, N. Y.*	Balentine Hall
FitzPatrick, James Joseph, Jr., Arts	*Marblehead, Mass.*	Σ Α Ε House
Flanagan, Eileen Mary, He.	*Bangor*	207 Maple Street, Bangor
Fletcher, Ruth Blackwell, Arts	*Anson*	The Elms
Foster, Earl Barrett, Fy.	*Fairfield*	Stillwater
Frederickson, Laurence Adolph, Arts	*Gloucester, Mass.*	Δ Τ Δ House
Freeman, Josephine Anne, Arts	*Portland*	South Hall
Gardner, Howard Delbert, Arts	*East Millinocket*	Φ Μ Δ House
Gartley, Myron Stewart, Ag.	*Presque Isle*	Φ Η Κ House
Gates, Stanley Richard, An.	*South Paris*	Α Γ Ρ House
Gavett, Andrew Willard, Me.	*Dennysville*	11 Beech Street
Genevicz, Ludwig William, Fy.	*Wellesley, Mass.*	College Road
Gerrish, Harold Aldrich, Arts	*Lisbon Falls*	Α Τ Ω House
Gerry, Franklin Wheeler, Me.	*Lewiston*	Σ Α Ε House
Gilpatrick, Arlo Eugene, Ee.	*Mars Hill*	Φ Μ Δ House
Glasser, Joseph Herman, Arts	*Roxbury, Mass.*	Τ Ε Φ House
Gogan, Patricia Kathryn, Arts	*Bangor*	R.F.D. #7, Bangor
Golden, Miriam Natalie, Arts	*Bangor*	326 State Street, Bangor
Goldsmith, Richard, Arts	*Salem, Mass.*	Φ Μ Δ House
Goodrich, William George, Fy.	*Morrisville, Vt.*	395 College Road
Goodwin, Mildred Ethel, Arts	*South Berwick*	South Hall
Gotlieb, Peter, Arts	*Bangor*	121 Grove Street, Bangor
Grant, Ralph Tozier, Ag.	*Presque Isle*	66 Park Street
Gray, Douglas Elliot, Fy.	*Warren*	Φ Κ Σ House
Gray, Gooden, Me.	*South Brooksville*	12 Park Street

Gray, Ruth Elizabeth, Arts	*Orono*	15 Mill Street
Greene, Leon Ardane, Fy.	*Auburn*	Λ X A House
Griffin, Thomas Frederick, Arts	*Newton Centre, Mass.*	10 Free Street, Stillwater
Grimmer, Stewart William, Arts	*Portland*	Φ Γ Δ House
Grindle, Mary Arline, Arts	*Bucksport*	South Hall
Gross, Stephen Keith, Me.	*Camden*	Φ K Σ House
Hall, Albert Ernest, Jr., Wc.	*Allentown, N. J.*	395 College Road
Hall, Christian Börs, Arts	*Houlton*	36 College Road
Hall, Marguarite Lucile, He.	*Orono*	24 Crosby Street
Hamilton, William Douglas, Fy.	*White Plains, N. Y.*	Φ Η K House
Hanley, Walter Edward, Fm.	*Orono*	48 Mill Street
Hannan, Hazen Betford, Ch.Eng.	*Liberty*	25 Grove Street
Harlow, Laurence Joseph, Ch.Eng.	*Barre Plains, Mass.*	Δ T Δ House
Harpe, Shirley Lillian, He.	*Bucksport*	17 Spencer Street
Harrington, Joseph Leonard, Ag.	*Patten*	University Cabin
Harris, John Norman, Ce.	*Anson*	Φ M Δ House
Harris, Louis Tolman, Fm.	*Milo*	K Σ House
Hart, Ann Arlene, He.	*South Hope*	South Hall
Hartwell, Henry Lloyd, Dh.	*Stetson*	25 Grove Street
Hatch, William Henry, Fy.	*Dark Harbor*	University Cabin
Hathaway, Henry Lloyd, Arts	*Winterport*	124 Main Street
Hauck, Margaret Ernestine, Arts	*Orono*	Campus
Hawes, Emil Franklin, Ce.	*Bangor*	32 Royal Road, Bangor
Hebel, Richard Edwin, Ce.	*Brewer*	178 Parker Street, Brewer
Hennessy, Louis Daniel, Ch.Eng.	*Brewer*	18 High Street, Brewer
Herrick, Lillian Roberta, Arts	*Lisbon Falls*	23 Bennoch Street
Hess, Phyllis Eleanor, Arts	*Hartford, Conn.*	Balentine Hall
Heughan, Herbert Milton, Arts	*Bangor*	395 College Road
Higgins, George Loring, Jr., Fy.	*Bangor*	706 Broadway, Bangor
Higgins, Harold Donham, Ce.	*Lewiston*	Σ A E House
Higgins, Raymond Dyer, Arts	*Dennysville*	Φ K Σ House
Hinckley, Catherine May, Arts	*Bangor*	The Elms
Hinckley, Irvia Louise, Arts	*Bluehill*	Balentine Hall
Hincks, Ramona Derr, Arts	*Portland*	South Hall
Hinkley, Philip Joseph, Ch.Eng.	*Cumberland Mills*	K Σ House
Holland, Stanley Robert, Me.	*Portland*	Σ X House
Holmes, Jane, Arts	*Farmington Falls*	The Elms
Holt, Fred Edward, Fy.	*Oxford*	University Cabin
Hooper, Natalie Elizabeth, Arts	*Rockport, Mass.*	Colvin Hall

Howard, Clayton Wendell, Fm.	*North Monmouth*	148 College Road
Howard, Preston Oliver, Me.	*Rumford*	Φ Γ Δ House
Howe, Louis William, Jr., Ce.	*Greene*	Φ Γ Δ House
Hunt, Orman Pearl, Dh.	*Clinton*	25 Grove Street
Hutchins, Leland Clair, Jr., Arts	*Bridgton*	Θ X House
Hutchinson, Philip Allan, Me.	*Cape Elizabeth*	134 West Broadway, Bangor
Jackman, Hope Adelaide, Arts	*Orono*	College Road
Jackman, Mary Sylvia, He.	*Mount Vernon*	South Hall
Jackson, Floyd Frederic, Arts	*Rumford*	Φ K Σ House
Jellison, Pauline Winifred, Arts	*Bangor*	341 French Street, Bangor
Jewett, George Herbert, Jr., Fm.	*Bucksport*	3 Park Street
Johnson, Elspeth Burnett, He.	*Gloucester, Mass.*	Balentine Hall
Johnson, Fred George, Arts	*Dennysville*	11 Beech Street
Johnson, Joseph Myron, Fm.	*Harrison*	25 Grove Street
Johnson, Marjorie Lois, Arts	*Millinocket*	Colvin Hall
Johnson, Paul Leslie, Fm.	*Brooks*	3 Park Street
Johnson, Stanley Fairfield, Fy.	*Brunswick*	College Road
Johnston, Frederick John, Arts	*Bangor*	Φ Γ Δ House
Johnston, Raymond Randall, Arts	*Fort Fairfield*	Φ H K House
Jones, Franklyn Lewis, Fy.	*South Portland*	Φ Γ Δ House
Jones, Mary Elizabeth, He.	*Mexico*	The Elms
Jordan, John Haskell, Fy.	*Fryeburg*	Λ T Ω House
Judkins, Albert Edwards, Ph.	*Upton*	University Cabin
Kane, Thomas Franklin, Jr., Arts	*Portland*	Θ X House
Keenan, William Patrick, Ch.Eng.	*Cape Elizabeth*	Φ Γ Δ House
Keneborus, George Anthony, Bc.	*Lewiston*	Θ X House
Kennedy, Mary Charlotte, He.	*Monmouth*	South Hall
Kenney, Howard Marshall, Ee.	*Millinocket*	Φ M Δ House
Kent, Rachel Woodman, He.	*Bangor*	16 Sixth Street, Bangor
Keyes, Allston Prentice, Ch.Eng.	*Washington, D. C.*	B Θ Π House
Kimball, Vernon Lord, Ce.	*Sangerville*	College Road
Knight, Mervin Taber, Me.	*Newton Centre, Mass.*	K Σ House
Knobler, Abraham, Pa.	*Jamaica, N. Y.*	T E Φ House
Knowlton, Charles Wentworth, Arts	*Carmel*	Θ X House
Knowlton, Robert Canfield, Arts	*Westbrook*	Λ X Λ House
Kruse, Elizabeth Marie, He.	*Bangor*	Balentine Hall
LaBarge, Bernard Aloysius, Pa.	*Bucksport*	Φ Γ Δ House
Ladd, Chester Morris, Fy.	*Waterville*	University Cabin

Laffin, Catherine Scribner, He.	*Ellsworth*	Colvin Hall
Lancaster, Helen Grace, He.	*Old Town*	154 Stillwater Avenue, Old Town
Lane, Arnold Clifford, Fy.	*Centerville, Mass.*	K Σ House
Lawrence, Estelle Merrill, He.	*Gray*	The Elms
Lawry, Edward Heath, Wc.	*Fairfield*	Β Θ Π House
Leafe, Russell Paul, Me.	*Worcester, Mass.*	Σ X House
Lewis, John, Jr., Ch.Eng.	*Skowhegan*	Φ K Σ House
Libbey, Elizabeth, He.	*Milford, Mass.*	The Elms
Lindell, Wiljo Maurice, Ch.Eng.	*Warren*	University Cabin
Lindsay, Andrew Gowen, Arts	*North Monmouth*	Park Street
Linscott, Stanley Paul, Wc.	*Cornish*	Φ Μ Δ House
Littlefield, John Thomas, Me.	*Brewer*	Β Θ Π House
Littlefield, Joseph Rackliff, Ce.	*Portland*	University Cabin
Locke, Boynton, Jr., Me.	*Boothbay Harbor*	395 College Road
Long, Cecile Elizabeth, He.	*Fort Kent*	Balentine Hall
Longley, Andrew Muirhead, Arts	*Georgetown, Mass.*	Δ Τ Δ House
Lord, Edwin Moor, Arts	*Skowhegan*	Σ X House
Loring, Malcolm Stevens, Fm.	*Portland*	Men's Infirmary
Loveitt, Herbert Francis, Me.	*South Portland*	60 Forest Avenue
Lucas, Robert Francis, Ce.	*York Village*	Σ Α Ε House
Lynch, Owen Albert, Arts	*Bangor*	K Σ House
McCain, James Stanley, Arts	*Houlton*	102 Mill Street
McClelland, Ruth Winifred, He.	*Wilmette, Ill.*	The Elms
McDonald, Robert Skillings, Ch.	*Portland*	Θ X House
MacDonald, Robert William, Me.	*York Village*	Σ X House
McDowell, Conrad Wayman, Arts	*Portland*	Δ Τ Δ House
McEachern, Carl Alexander, Ce.	*Greenville Junction*	32 Pierce Street
MacGillivray, John Oliver, Fy.	*Newton Lower Falls, Mass.*	56 North Main Street
MacGregor, Walter Newell, Ee.	*Eastport*	36 College Road
McLaughlin, Eugene Lawrence, Fm.	*Limestone*	Δ Τ Δ House
McNeill, Warren Rupert, Fy.	*Bath*	Φ Η Κ House
McPhee, Lawrence Louis, Ee.	*Old Town*	42 Union Street, Old Town
McPheters, Leonard Lamont, Me.	*Bangor*	15 Savage Street, Bangor
McPheters, Linwood Snider, Me.	*Bangor*	15 Savage Street, Bangor

Maasen, John Henry, Jr., Wc.	*Scarsdale, N. Y.*	Φ K Σ House
Mackay, Hugh Paterson, Fy.	*Winter Harbor*	Φ H K House
Maines, John Thornton, Fy.	*Hartford, Conn.*	B Θ Π House
Maisel, Sophie, He.	*Belfast*	Balentine Hall
Maling, Helen Louisa, Arts	*Kennebunkport*	South Hall
Marks, Phyllis Ruth, Arts	*Brookline, Mass.*	Colvin Hall
Marsh, John Ambrose, Fy.	*Bridgeport, Conn.*	Φ H K House
Marshall, Donald McCutcheon, Me.	*Bath*	Σ N House
Martin, Frank Samuel, Me.	*Bath*	Φ M Δ House
Martin, Oscar Romuald, Ae.	*Frenchville*	12 Park Street
Maxwell, Margaret, Arts	*Bangor*	Colvin Hall
Merrill, Edward Harris, Fy.	*Lincoln*	College Road
Merrill, Fred Patterson, Ce.	*Bangor*	254 Elm Street, Bangor
Merrill, Robert Stanton, Wc.	*Gray*	Σ X House
Mitchell, Nahum Wentworth, Jr., Ch.Eng.	*West Newfield*	Φ Γ Δ House
Moore, Donald Horatio, Wc.	*Beverly, Mass.*	Δ T Δ House
Moore, Eugene Lincoln, Fy.	*Houlton*	Φ H K House
Morin, Paul Eugene, Fy.	*Cranston, R. I.*	Σ X House
Morneault, Adrian Lucian, Ag.	*Lille*	28 Main Street
Morton, Richard Gwynne, Me.	*Farmington*	Σ A E House
Mulholland, Elizabeth Catherine, Arts	*Lubec*	The Elms
Murphy, Muriel Margaret, He.	*Fort Fairfield*	Balentine Hall
Murphy, Robert Elwood, Arts	*Oakfield*	Φ H K House
Nelson, Harley Cummings, Ch.Eng.	*Reading, Mass.*	Δ T Δ House
Nelson, Harry Servatus, Jr., Me.	*North Vassalboro*	Φ M Δ House
Nickerson, Thomas Henry, Ee.	*Harrington*	B Θ Π House
O'Brien, Oric Osman, Fy.	*Brooks*	Φ H K House
Odlin, Clifford Woodbridge, Ee.	*Cape Elizabeth*	Φ M Δ House
Palmer, Raymond Jordan, Arts	*West Roxbury, Mass.*	K Σ House
Pangburn, Alvah Edward, Ag.	*Caribou*	Φ H K House
Paris, Frederic David, Fy.	*Princeton, N. J.*	134 College Road
Patterson, Crosby Gardner, Arts	*Bangor*	72 Center Street, Bangor
Patterson, Paul Kieth, Fy.	*Willimantic*	395 College Road
Paul, James Stuart, Ce.	*Fort Fairfield*	Φ H K House
Paulin, Lucille Bernice, He.	*Bangor*	442 Essex Street, Bangor
Peabody, Herbert Stanley, Fm.	*Houlton*	K Σ House
Pease, Virginia Frances, Arts	*Wiscasset*	Balentine Hall
Peaslee, Margaret Hall, He.	*Concord, N. H.*	The Elms

Peirce, Charles Albert, Jr., Arts	*Bangor*	205 Elm Street, Bangor
Phair, Dorothy Elizabeth, He.	*Limestone*	The Elms
Phelps, Mary Pond, Arts	*Foxboro, Mass.*	The Elms
Pierce, Earle Sidney, Fm.	*Old Town*	34 Sixth Street, Old Town
Pierson, Alvalene May, Arts	*Tenants Harbor*	South Hall
Piorkowski, Henry Paul, Ch.Eng.	*Union City, Conn.*	Σ X House
Piper, Richard Simmons, Ch.Eng.	*Brewer*	230 Center Street, Brewer
Pipes, Ralph Lawrence, Arts	*New Limerick*	102 Mill Street
Plummer, John Flagg, Ce.	*Bangor*	32 Coombs Street, Bangor
Potter, Walter Edwin, Ph.	*Sabattus*	Α Γ Ρ House
Powell, Stephen Edwin, Wc.	*Orono*	73 Forest Avenue
Powers, Harry Adams, Jr., Ee.	*Wakefield, Mass.*	Κ Σ House
Pratt, Clarence LeRoy, Arts	*Bangor*	R.F.D. #2, Bangor
Pratt, John Harold, Wc.	*Oxford*	Δ Τ Δ House
Pray, Lucie Adelaide, Arts	*Melrose, Mass.*	Balentine Hall
Rader, William August, Ce.	*Westfield, N. J.*	Φ Η Κ House
Rand, John Albert, Ph.	*North Anson*	Α Γ Ρ House
Randlett, Evelyn May, Arts	*Dark Harbor*	Balentine Hall
Ray, Conrad Alan, Ch.Eng.	*Canton*	Δ Τ Δ House
Raymond, Roy Claude, Me.	*Limestone*	Φ Κ Σ House
Reed, Carolyn Pennell, He.	*Portland*	The Elms
Reed, Cecil Edward, Me.	*Southwest Harbor*	Δ Τ Δ House
Reed, John Preston, Ht.	*South Brewer*	R.F.D. 8, South Brewer
Reynolds, Arthur William, Ht.	*Northeast Harbor*	Σ Α Ε House
Reynolds, Ralph Milton, Ce.	*Orono*	5 Forest Avenue
Rhoda, Frances Eleanor, He.	*Milo*	Balentine Hall
Rich, Edwin Stanton, Ee.	*Charleston*	25 Grove Street
Rich, Nathan Harold, Me.	*Charleston*	Stillwater
Richard, Octave Francis, Ce.	*Bangor*	170 Garland Street, Bangor
Richardson, Arthur William, Me.	*Poland*	Φ Γ Δ House
Robbins, Lorna, Arts	*Lincoln*	Colvin Hall
Roberts, Malcolm Woodbury, Fm.	*Alfred*	Commons
Robertson, Eleanor Maxine, He.	*Portland*	South Hall
Robie, Frederick Wilbur, Me.	*Auburn*	Φ Μ Δ House
Robie, Harriet, He.	*Gorham*	The Elms
Robinson, Edward Melvin, Arts	*Calais*	24 First Street, Bangor
Roche, Paul Joseph, Arts	*Eastport*	80 North Main Street
Ross, Edward Ernest, Fy.	*Orono*	356 College Road

Roth, Alice Patricia, Ed.	*Stratford, Conn.*	15 Pierce Street
Ruben, Howard, Arts	*Belfast*	6 Mill Street
Rubin, Herbert Elliott, Arts	*Newburgh, N. Y.*	Τ Ε Φ House
Rubinoff, Dorothy Helene, He.	*Portland*	The Elms
Ruddock, Edward Francis, Me.	*Kittery*	73 Forest Avenue
Runion, Leona May, Arts	*Orono*	15 Pond Street
Russell, Eugene Osborne, Ch.Eng.	*Yarmouth*	17 Margin Street
Russell, Marianne Louise, Arts	*Phillips*	Balentine Hall
Saltzman, Ada Edythe, He.	*Bangor*	303 Broadway, Bangor
Samuelson, Robert Wentworth, Arts	*Lexington, Mass.*	Β Θ Π House
Savage, Elnora Louise, Arts	*Bangor*	127 Maple Street, Bangor
Sawyer, Margaret Claire, He.	*Gray*	Balentine Hall
Sawyer, Richard Miles, Me.	*Portland*	Φ Μ Δ House
Schmidt, George Gerald, Bc.	*Forest Hills, N. Y.*	Σ Χ House
Schoppe, Fred Holway, Jr., Dh.	*Machias*	Α Γ Ρ House
Schultz, Walter Melvin, Arts	*Portland*	35 Grove Street
Scribner, Mary, Arts	*Topsham*	Balentine Hall
Sherman, Robert Chesman, Fm.	*Boothbay*	Δ Τ Δ House
Shipman, Wayne Fonda, Jr., Ht.	*Worcester, Mass.*	60 Park Street
Shiro, Dorothy Elizabeth, Arts	*Bar Harbor*	The Elms
Shiro, James Cople, Arts	*Old Town*	30 South Fourth Street, Old Town
Simpson, Anna Margaretha, He.	*South Gray*	South Hall
Smart, Atwood Ora, Arts	*Houlton*	102 Mill Street
Smith, Basil Lougee, Arts	*Winterport*	Κ Σ House
Smith, Blake Harmon, Ag.	*Exeter*	Σ Α Ε House
Smith, Donald Calvin, Ag.	*Easton*	Φ Η Κ House
Smith, Frank Miller, Fm.	*Lincolnville*	25 Grove Street
Smith, Ralph Getchell, Ag.	*Exeter*	25 Grove Street
Smith, Richard Marvard, Ht.	*Orono*	382 College Road
Sparks, Donald Tennyson, Arts	*Monticello*	160 Essex Street, Bangor
Spencer, Carl Edward, Ch.Eng.	*Anson*	111 Park Street
Spofford, Gerald Ellsworth, Wc.	*Kennebunk*	Φ Η Κ House
Spruce, Irene Burr, He.	*Orono*	130 College Road
Stanley, Edward Waldron, Me.	*Farmington*	Φ Μ Δ House
Staples, Harry Josiah, Fm.	*Brunswick*	Κ Σ House
Steeves, Jerome Irving, Wc.	*Lincoln*	Φ Μ Δ House
Steinmetz, Margaret Olive, He.	*Orono*	38 North Main Street

Stevens, Blair, Arts	*Bangor*	451 Union Street, Bangor
Stewart, Robert Frank, Ch.Eng.	*Winthrop*	Λ X Λ House
Stone, Theodore Mordecai, Arts	*Dorchester, Mass.*	T E Φ House
Striar, Louis, Ee.	*Bangor*	14 Adams Street, Bangor
Stuart, Parker Osborne, Ce.	*Bridgton*	2 Summer Street
Sullivan, Elizabeth Frances, He.	*Bangor*	31 Spruce Street, Bangor
Susi, Guy, Ce.	*Burnham*	6 Mill Street
Swartz, Maynard Erwin, Arts	*Roxbury, Mass.*	T E Φ House
Sweet, Sherley Marcus, Arts	*Bar Harbor*	77 Mill Street
Sylvester, Norma Leone, Arts	*Deer Isle*	The Elms
Thibodeau, Gauthier Abel, Wc.	*Auburn*	88 Park Street
Thomas, Frances Priscilla, Arts	*Houlton*	Colvin Hall
Thomas, Kenneth Llewellyn, Arts	*Portland*	8 Juniper Street
Thompson, Harold Everett, Ee.	*Leominster, Mass.*	Φ M Δ House
Thompson, Mary Catherine, He.	*Orono*	31A Mill Street
Thompson, Merrill Gene, Me.	*Southport*	K Σ House
Thorn, Raymond Edgar, Ee.	*Reading, Mass.*	395 College Road
Tondreau, Gertrude Ruth, Arts	*Brunswick*	The Elms
Trask, Allen Dudley, Ch.Eng.	*Melrose Highlands, Mass.*	Σ X House
Trask, Doreen Mildred, He.	*Farmington*	Balentine Hall
Trask, Roger Boardman, Fy.	*Bangor*	234 Pine Street, Bangor
Treat, William Wardwell, Arts	*Winterport*	Φ H K House
Tremaine, Richard Leighton, Ee.	*Bangor*	410 French Street, Bangor
Trickey, Ruth Elizabeth, Arts	*Pittsfield*	Colvin Hall
Tufts, Marion Rhoda, He.	*South Berwick*	South Hall
Turner, Frederick Wayne, Dh.	*Stetson*	25 Grove Street
Tuttle, Virginia Margaret, Arts	*East Corinth*	South Hall
Upham, Mary Adelaide, Arts	*Biddeford*	South Hall
Upton, Frank Eric, Fm.	*Monticello*	102 Mill Street
VanNostrand, Elaine Elizabeth, Arts	*Somerville, N. J.*	74 North Main Street
Verrill, Harland Robert, Arts	*Winterport*	Campus
Violette, William Andrew, Ce.	*Balboa, Canal Zone*	Σ X House
Warner, Helen Althea, He.	*Bangor*	192 Fourteenth Street, Bangor
Warren, Julia Winifred, Arts	*Lubec*	Balentine Hall

Weaver, Charles Lancaster, Ce.	*Presque Isle*	Φ H K House
Weeks, Carl Gottfred, Ee.	*Dresden Mills*	230 Main Street
West, Althea Shirley, Arts	*North Berwick*	The Elms
West, William Francis, Jr., Arts	*Bangor*	Φ Γ Δ House
Westin, Linnea Beatrice, Arts	*Bangor*	114 Allen Street, Bangor
Wheeler, Harold Randolph, Pa.	*Fulton, N. Y.*	Φ K Σ House
Wheeler, Samuel Edward, An.	*Farmington*	Σ A E House
Whicher, Ralph Francis, Bc.	*Springvale*	Σ A E House
White, Marion Louise, Arts	*Bangor*	359 Hammond Street, Bangor
Whitman, Edith Irene, He.	*Stonington*	South Hall
Whitney, Clifton Eugene, Fm.	*Winn*	25 Grove Street
Whitney, Louis Alden, Me.	*Brewer*	179 Wilson Street, Brewer
Whitney, Norman Eveleth, An.	*West Newton, Mass.*	A T Ω House
Wight, Willard Alanson, An.	*North Newry*	University Cabin
Williams, Rees Coffin, Me.	*Westwood, Mass.*	K Σ House
Willins, Linwood Gerald, Ch.Eng.	*Bucksport*	University Cabin
Wilson, Charles, Ch.Eng.	*Eastport*	Φ M Δ House
Wilson, Gleason Woodrow, Fm.	*Jonesboro*	College Road
Wood, Robert Curtin, Fy.	*Portland*	Σ A E House
Woodward, Joyce Clara, Arts	*Auburn*	South Hall
Worcester, Ruth Mabel, He.	*Newtonville, Mass.*	Balentine Hall
Wright, Samuel Judd, An.	*Clinton*	Farm Boarding House
Wright, William Prentiss, Arts	*Portland*	Σ X House
Young, Constance, He.	*Norway*	South Hall

UPPERCLASS STUDENTS CONDITIONED FOR ADMISSION

Belknap, Russell Eliot, Me.	('40)	*Norfolk, Mass.*	B Θ Π House
Blom, Carl Johansen, Arts	('40)	*Portland*	Θ X House
Carter, Elton Stewart, Arts	('40)	*Mapleton*	202 Oak Hall
Darveau, George Francis, Arts	('40)	*Orono*	59 Park Street
Doten, Nathaniel Miles, Jr., Arts	('40)	*Newton Highlands, Mass.*	University Cabin
Golden, Francis Patrick, Fy.	('40)	*Hampden Highlands*	Hampden Highlands
McPherson, Dalmar Serner, Arts	('40)	*Stillwater*	Stillwater
Maguire, Mary Virginia, Eh.	('39)	*Portland*	Balentine Hall
Mitchell, Edwin Matthew, Ee.	('40)	*Old Town*	Indian Island, Old Town

Nunan, Richard Tribler, Es.	('39)	*Monhegan*	83 Park Street
Robertson, Robert Brewer, Arts	('40)	*Presque Isle*	25 Grove Street

FRESHMEN

Achorn, Phyllis Mae, Arts	*Lee*	The Maples
Adams, Albert Hayden, Ch.Eng.	*Canton Point*	104 H. H. Hall
Adams, Charles Edward, Jr., Eng.	*Madison*	University Cabin
Adams, Clarence Kempton, Agr.	*Easton*	202 H. H. Hall
Adams, Earl Castner, Arts	*Portland*	204 H. H. Hall
Albert, Joseph James, Ch.Eng.	*Bangor*	22 Patten Street, Bangor
Alford, Wilson Merriman, Ce.	*Windsor, Conn.*	102 H. H. Hall
Allen, Henry Whitney, Ch.Eng.	*Freeport*	101 Oak Hall
Ames, Marjorie, He.	*Bangor*	70 Fourth Street, Bangor
Anderson, Clayton Oliver, Ch.Eng.	*Cape Elizabeth*	104 H. H. Hall
Anderson, Edward Revere, Fy.	*Canton, Mass.*	7 Kell Street
Anderson, Harold Frederick, Ch.Eng.	*Arlington, Mass.*	403 H. H. Hall
Anderson, Roy Laurel, Agr.	*Newport*	25 Grove Street
Arbor, Charles Joseph, Arts	*Rumford*	202 H. H. Hall
Ashworth, Barbara Rose, Arts	*Orono*	88 North Main Street
Astor, David, Arts	*Portland*	101 H. H. Hall
Austin, George Mellen, Jr., Arts	*Milford*	Milford
Averill, Albert Perry, Agr.	*Dryden*	25 Grove Street
Babel, William Keith, Fy.	*Buffalo, N. Y.*	17 Margin Street
Bacigalupo, Stephen Andrew, Arts	*Boston, Mass.*	202 H. H. Hall
Bailey, Clifford Earle, Ch.Eng.	*Winn*	25 Grove Street
Baker, Charles Leo, Me.	*Bucksport*	311 Oak Hall
Banton, Hartley Lanpher, Ee.	*Newport*	108 Oak Hall
Barrett, Barbara, He.	*Orono*	11 Pierce Street
Barter, Sarah Louise, He.	*Clinton*	87 Main Street
Bartley, Henry Havelock, Agr.	*Presque Isle*	25 Grove Street
Barton, James Francis, Pa.	*Monmouth*	370 College Road
Bates, Mary Lena, He.	*Bath*	The Maples
Beasom, George Reynold, Jr., Bt.	*Newton Centre, Mass.*	105 Oak Hall
Bell, Kenneth Deane, Me.	*Woodland*	7 Forest Avenue
Bennett, Robert Howard, Eng.	*Cranston, R. I.*	410 H. H. Hall
Benson, Ruth Ellen, He.	*Kennebunkport*	23 Bennoch Street
Berry, Rockwood Norton, Agr.	*Livermore Falls*	211 Oak Hall

Billings, Nathaniel Andrew, Jr., Eng.	*West Newton, Mass.*	204 Oak Hall
Black, Gardner Angus, Ch.Eng.	*Orono*	80 Forest Avenue
Black, Irving Halsey, Fy.	*Long Branch, N. J.*	395 College Road
Blackstone, Fred Jones, Jr., Ce.	*Caribou*	210 H. H. Hall
Blaisdell, Donald, Me.	*Reading, Mass.*	208 H. H. Hall
Blaisdell, Kenneth Wilbur, Arts	*Ellsworth*	306 H. H. Hall
Blake, William Leslie, Ch.Eng.	*Boothbay Harbor*	395 College Road
Blanchard, Russell Philip, Agr.	*Mars Hill*	305 H. H. Hall
Blanchard, Winifred, Arts	*Dryden*	The Elms
Blethen, John, Jr., Ch.Eng.	*Rockland*	201 H. H. Hall
Bonacorso, Edward Samuel, Arts	*Everett, Mass.*	395 College Road
Bond, Avery Lindley, Eng.	*Jefferson*	148 Main Street
Boone, Mary Elizabeth, He.	*Presque Isle*	66 Park Street
Boudreau, Henry Clement, Ch.Eng.	*Waterville*	College Road
Boyle, Elmer Louis, Arts	*Great Works*	Great Works
Boyle, Harry Louis, Jr., Eng.	*Bangor*	59 Essex Street, Bangor
Boyle, Jean Elisabeth, Arts	*Madison*	North Hall
Boyle, Kathleen Mary, Arts	*Madison*	North Hall
Boynton, Arthur Marshall, Ee.	*Palermo*	25 Grove Street
Brackett, Donald Twitchell, Fy.	*Portland*	105 Oak Hall
Bramhall, Richard Arthur, Eng.	*Quincy, Mass.*	204 Oak Hall
Bridges, June Hanson, Arts	*Boundary Cottage*	North Hall
Brink, Robert Morris, Ee.	*Cape Elizabeth*	409 H. H. Hall
Brodie, Julius, Arts	*Outremont, Que., Canada*	101 H. H. Hall
Brody, Sidney Saul, Me.	*East Dedham, Mass.*	110 H. H. Hall
Brown, Brooks, Jr., Arts	*Augusta*	308 Oak Hall
Brown, Carl Raymond, Ee.	*Kenduskeag*	10 Cottage Street, Bangor
Brown, Dwight Adams, Arts	*Ellsworth Falls*	104 H. H. Hall
Brown, Leroy Clark, Agr.	*Farmington*	College Road
Brown, Merle Sedgewick, Jr., Arts	*South Portland*	201 H. H. Hall
Brown, Miriam Agnes, He.	*Norway*	North Hall
Brown, Priscilla Evelyn, He.	*Milford*	Milford
Brown, Walter Eastman, Jr., Ce.	*Bucksport*	311 Oak Hall
Brownell, Arnold Buffum, Fy.	*Cape Elizabeth*	204 H. H. Hall
Browning, Elywin Tardeff, Ch.Eng.	*South Brewer*	27 Goupee Street, South Brewer
Brundage, Alfred Griswold, Agr.	*Danbury, Conn.*	204 H. H. Hall
Buck, Raymond Wilbur, Jr., Agr.	*Monticello*	307 Oak Hall

Burden, Frederick Ernest, Arts	*Presque Isle*	47 Mill Street
Burke, Joseph Francis, Ch.Eng.	*Union City, Conn.*	60 Forest Avenue
Burke, Mary Frances, Arts	*Bangor*	State Street, Bangor
Burton, Blendin LeRoy, Ch.	*Bangor*	77 Webster Avenue, Bangor
Bushnell, Cornelius Huntington, Jr., Ch.Eng.	*Whitefield*	203 H. H. Hall
Butterworth, Dale Jared, Fy.	*Wrentham, Mass.*	204 H. H. Hall
Buzzell, Calista Louise, Arts	*Milford*	Milford
Byer, David Louis, Ee.	*Bangor*	36 Essex Street, Bangor
Byrne, John Francis, Me.	*Marlboro, Mass.*	80 North Main Street
Cahill, Anna Robena, Arts	*Bangor*	529 Main Street, Bangor
Candage, Byron Whitefield, Ce.	*Seal Harbor*	205 Oak Hall
Carlisle, Robert, Arts	*Bangor*	15 Montgomery Street, Bangor
Carpenter, Roy Elbert, Jr., Fy.	*Medford, Mass.*	406 H. H. Hall
Carr, George Raymond, Ee.	*Plattsburg, N. Y.*	25 Myrtle Street
Carter, John Merrill, Arts	*Etna*	80 North Main Street
Carver, Clara Ernestine, He.	*Vinalhaven*	North Hall
Cates, Clement Dixon, Jr., Arts	*Winterport*	302 Oak Hall
Chapman, Mary Joan, He.	*Orono*	13 Park Street
Chapman, Mildred Lombard, He.	*Orono*	13 Park Street
Chase, Faulkner Earlmont, Arts	*Bryant Pond*	409 Oak Hall
Chase, Gordon Elms, Arts	*Bryant Pond*	407 H. H. Hall
Chase, Richard Holden, Ce.	*Sharon, Mass.*	205 Oak Hall
Chase, Richard Raymond, Pa.	*Portland*	203 H. H. Hall
Chipman, Lester Duran, Ee.	*Mechanic Falls*	27 Wiley Street, Bangor
Christie, Alice Elizabeth, Arts	*Somerville, Mass.*	The Maples
Clark, Arnold Hinckley, Ch.	*Liberty*	14 Park Street
Clark, Eva Adeline, He.	*Orono*	32 College Road
Clement, John Caldwell, Jr., Arts	*Belfast*	407 H. H. Hall
Cliff, Elizabeth Patricia, He.	*Presque Isle*	The Elms
Cobb, Sterling Ellsworth, Agr.	*Lee*	25 Grove Street
Coffin, Robert William, Me.	*Harrington*	212 Oak Hall
Cohen, Milford Francis, Ch.	*Portland*	101 H. H. Hall
Colby, John Seagrave, Arts	*South Paris*	402 Oak Hall
Colley, Chester Arthur, Fy.	*Newton Centre, Mass.*	205 H. H. Hall

Comeau, Donna Wilda Mary, He.	*Bangor*	North Hall
Comstock, Corrine Lovella, Arts	*Millinocket*	The Elms
Conlan, Mabelle Blanche, Arts	*Biddeford*	32 College Road
Connors, Ernest Wilbur, Eng.	*Lincolnville*	25 Grove Street
Cook, Richard Lewis, Fy.	*Brooklyn, N. Y.*	301 H. H. Hall
Cooper, Laurence Arthur, Jr., Ch.Eng.	*Auburn*	109 Oak Hall
Cote, Hermenegilde Paul, Arts	*Lewiston*	405 H. H. Hall
Cotton, George Benjamin, Ch.Eng.	*Auburn*	304 Oak Hall
Cousins, Edith Mary, He.	*Old Town*	94 North Fourth Street, Old Town
Cowan, Frederick Walter, Fy.	*Portland*	112 H. H. Hall
Cowin, Stanley Joseph, Jr., Eng.	*Orono*	8 Elm Street
Craft, Laura Ursula, He.	*Bath*	The Maples
Craig, John Stryker, Me.	*Bingham*	7 Forest Avenue
Crandall, Quenton Kenwood, Arts	*Presque Isle*	104 Oak Hall
Crane, Judson Burleigh, Ce.	*Whiting*	304 Oak Hall
Creamer, Mavis Lorraine, Arts	*Calais*	The Maples
Crockett, Clyde Weston, Fy.	*Portland*	35 Grove Street
Cromwell, Margaret Emma, Arts	*Bangor*	98 Patten Street, Bangor
Crosby, Isabella, Arts	*Dexter*	The Elms
Crouse, Frederick Marshall, Agr.	*Crouseville*	301 H. H. Hall
Culberson, Sara Louise, He.	*Easton*	North Hall
Cummings, Alfred Parker, Pa.	*Springdale, Conn.*	301 H. H. Hall
Cummings, Philip Edson, Arts	*Portland*	301 Oak Hall
Cummings, Robert Ambrose, Ch.Eng.	*Bryant Pond*	7 Kell Street
Curley, John Irving, Jr., Pa.	*Rumford*	308 H. H. Hall
Curtis, Wilma, He.	*Searsport*	The Maples
Darling, Chester Allen, Fy.	*Orleans, Mass.*	24 Pierce Street
DaSilva, Boaventura Lopes, Arts	*Fairhaven, Mass.*	395 College Road
Day, Linwood McGuire, Arts	*Westbrook*	12 Kell Street
Dearborn, John Bartholomew, Me.	*Ansonia, Conn.*	307 Oak Hall
Dearborn, Richard Wright, Arts	*Cape Elizabeth*	302 H. H. Hall
Dearborn, Russ Parker, Me.	*Melrose, Mass.*	312 H. H. Hall
Delano, Raymond Frederick, Agr.	*East Corinth*	25 Grove Street
Demant, William Hans, Fy.	*East Orange, N. J.*	302 H. H. Hall
Devoe, Donald Brown, Arts	*Bangor*	221 Elm Street, Bangor
Dexter, Franklin Dunbar, Ch.Eng.	*Martinsville, N. J.*	86 Mill Street
Dinsmore, Joseph Smart, Jr., Arts	*Bangor*	151 Court Street, Bangor
Dondis, Meredith Philip, Arts	*Rockland*	430 College Road

Dougherty, Eleanor Mary, He.	*Camden*	The Maples
Douglas, Earl Graeme, Ee.	*Hull, Mass.*	408 H. H. Hall
Downs, Fordyce Raymond, Jr., Eng.	*Portland*	211 H. H. Hall
Drummond, Esther Hinckley, Arts	*Arrowsic*	The Maples
Duffey, Richard Vincent, Fy.	*East Orange, N. J.*	304 H. H. Hall
Dumas, Paul Raymond, Fy.	*Houghton*	17 Margin Street
Dunning, Herbert Harris, Bt.	*West Roxbury, Mass.*	304 H. H. Hall
Duplissa, George Allan, Jr., Arts	*Old Town*	53 Veazie Street, Old Town
Dyer, John Reed, Me.	*Augusta*	15 Park Street
Earnshaw, John, Jr., Ee.	*Fall River, Mass.*	304 H. H. Hall
Eddy, Virginia Ellen, Arts	*Scarsdale, N. Y.*	332 Stillwater Avenue, Old Town
Edgecomb, Raymond Henry, Ch.Eng.	*Sebago Lake*	403 Oak Hall
Edmunds, John Joseph, Jr., Ee.	*Mars Hill*	308 Oak Hall
Ehrlenbach, Howard Lincoln, Fy.	*Saratoga Springs, N. Y.*	17 Margin Street
Ellis, George Hathaway, Arts	*Orono*	29 Park Street
Emery, Clarence Eugene, Jr., Agr.	*Portland*	307 H. H. Hall
Emery, Elizabeth Mason, He.	*Bucksport*	The Elms
Evans, Joanna Holmes, He.	*Wiscasset*	The Elms
Fairchild, Thomas Leonard, By.	*Jay*	212 Oak Hall
Farmer, Blaine Linwood, Me.	*Greene*	103 Oak Hall
Farnham, Florence Julia, He.	*Lynn, Mass.*	The Maples
Fenderson, Willard Edward, Arts	*Calais*	310 Oak Hall
Fergatto, Antonio Frank, Arts	*Portland*	303 H. H. Hall
Fickett, Paul Raymond, Jr., Me.	*Augusta*	310 Oak Hall
Fifield, Alma Marguerite, Arts	*Brewer*	71 Parker Street, Brewer
Fogg, Philip Sprague, Jr., Eng.	*Melrose, Mass.*	303 H. H. Hall
Frost, Albert Hyldon, Arts	*Dexter*	112 H. H. Hall
Frost, Howard Robinson, Arts	*Westfield, Mass.*	7 Kell Street
Fuller, Leroy Frank, By.	*Scarsdale, N. Y.*	103 H. H. Hall
Gallagher, Keith Navarre, Agr.	*Limestone*	103 H. H. Hall
Gammons, Elizabeth, Arts	*East Greenwich, R. I.*	The Elms
Gardner, Charles Sherer, Me.	*Orono*	133 Main Street
Gardner, Horace Leonard, Jr., Me.	*Freeport, N. Y.*	401 H. H. Hall

Gardner, Roderic Adie, Arts	*Cape Elizabeth*	103 Oak Hall
Garland, Wayne Marsh, Me.	*Bangor*	63 Wiley Street, Bangor
Garland, Winton Steward, Fy.	*Bangor*	63 Wiley Street, Bangor
Garrison, Ruth Jeannette, Arts	*Madison*	The Elms
Garvin, Isabella Baldwin, He.	*Alfred*	24 University Place
Genge, Clarence Kitchener, Ch.Eng.	*Arlington, Mass.*	401 Oak Hall
Gifford, William Edward, Ch.	*Bangor*	11 Hudson Street, Bangor
Gilbert, Eugene Clarence, Jr., Ch.Eng.	*Winterport*	404 Oak Hall
Gilman, George Dudley, Fy.	*North Abington, Mass.*	103 H. H. Hall
Gleason, Beatrice Helen, Arts	*South Portland*	North Hall
Gleich, Florence Cyril, Arts	*South Fallsburg, N. Y.*	15 Pierce Street
Goodchild, Donald Wood, Ch.Eng.	*Saco*	203 H. H. Hall
Goodrich, Sidney Joseph, Me.	*Gorham*	77 Mill Street
Goodwin, Donald Hugh, Ch.Eng.	*Gardiner*	203 H. H. Hall
Goodwin, Robert Burrill, Eng.	*Brewer*	119 Parker Street, Brewer
Goos, Phillip, Ch.	*Bangor*	87 Birch Street, Bangor
Gopan, Max, Arts	*Bangor*	107 Birch Street, Bangor
Gordon, Hyma Alton, Me.	*Lincoln Center*	25 Grove Street
Gosline, Walter Wadsworth, Eng.	*Gardiner*	395 College Road
Grant, Elizabeth Payson, He.	*Portland*	The Elms
Grant, George Crandlemire, Fy.	*Waterville*	102 H. H. Hall
Grant, Rebecca Evelyn, He.	*Sangerville*	North Hall
Graves, Robert Harrison, Me.	*Plattsburg, N. Y.*	402 H. H. Hall
Green, Ruth Ella, Arts	*Spencer, Mass.*	Balentine Hall
Greenlaw, David Sutton, Ch.Eng.	*Norway*	404 Oak Hall
Greenwood, David Carroll, Me.	*Gardner, Mass.*	207 H. H. Hall
Griffin, Lloyd Wilfred, Agr.	*Bradford, Mass.*	Park Street
Griffith, Sidney Owen, Jr., Fy.	*Kezar Falls*	212 H. H. Hall
Grinnell, Kenneth Paul, Fy.	*Newton Centre, Mass.*	402 H. H. Hall
Gushee, Richard Alan, Arts	*Union*	430 College Road
Hall, Charles Alfred, By.	*Castine*	201 H. H. Hall
Hall, Clayton, Arts	*Harrington*	309 Oak Hall
Halliwill, Birney Francis, Fy.	*Kingston, Mass.*	302 H. H. Hall
Hamilton, James Oliver, 2nd, Me.	*Waterboro*	202 Oak Hall
Hamlin, Carl Morrill, Pa.	*Milo*	395 College Road
Hamlin, George Harold, Ce.	*Orono*	158 Main Street

Hamm, Harold Isaiah, Arts	*Bangor*	65 Kenduskeag Avenue, Bangor
Hansen, Alma Mabel, Arts	*Portland*	North Hall
Hanson, Fred Crowell, Eng.	*Bangor*	396 French Street, Bangor
Hardy, Malcolm Edward, Fy.	*Waban, Mass.*	401 H. H. Hall
Hardy, William Robert, Agr.	*Hope*	25 Grove Street
Harnish, Raymond Richard, Fy.	*Anson*	406 Oak Hall
Harris, James William, Arts	*Winchester, Mass.*	401 H. H. Hall
Harris, Spencer, Fy.	*Ocean Grove, N. J.*	395 College Road
Hartwell, James Haywood, Ce.	*Trenton, N. J.*	86 Mill Street
Hatchard, Donald Gordon, Ee.	*Tenafly, N. J.*	36 College Road
Hatt, Gordon Richard, Fy.	*Patten*	36 College Road
Hayes, Priscilla Helen, He.	*North Windham*	North Hall
Hill, Virginia, Arts	*Reading, Mass.*	North Hall
Hiller, Robert Frederick, Fy.	*Foxboro, Mass.*	205 H. H. Hall
Hodgdon, Kenneth Willis, Fy.	*Anson*	University Cabin
Hodgkins, Emmons Blaine, Jr., Arts	*Salisbury Cove*	395 College Road
Hodgkins, Robert Francis, Fy.	*Bar Harbor*	395 College Road
Holden, Donald Webster, Fy.	*North Bridgton*	403 H. H. Hall
Holmes, Allan Bragdon, Ee.	*Guilford*	112 Oak Hall
Holyoke, Donald Brooks, Agr.	*Brewer*	Eastern Avenue, Brewer
Hook, Walter Allan, Ce.	*Portland*	403 H. H. Hall
Hopgood, Winthrop Clarke, Arts	*Brockton, Mass.*	112 H. H. Hall
Hopkins, Elizabeth Marian, Arts	*Lexington, Mass.*	The Maples
Hopkins, Emily Marjorie, He.	*Waterville*	The Maples
Hopkins, Harry Saunders, Eng.	*Brooklin*	Campus
Hopkins, Richard Samuel, Me.	*Bucksport*	395 College Road
Howe, Robert Frank, Agr.	*Framingham, Mass.*	303 Oak Hall
Howe, Virginia Mae, He.	*Union*	North Hall
Howes, Cecil Edgar, Ch.Eng.	*Patten*	52 Blackstone Street, Bangor
Hoyt, John Folsom, Ce.	*Fort Fairfield*	404 H. H. Hall
Humphries, Angus Edward, Fy.	*Perry*	101 Oak Hall
Hutcheon, James Lewis, Agr.	*Presque Isle*	107 Oak Hall
Hutchins, Martha Elizabeth, Arts	*Kingfield*	North Hall
Ingalls, Earle Lewis, Fy.	*Gorham*	408 Oak Hall
Ingham, Joseph Morton, Arts	*Concord, N. H.*	409 Oak Hall
Irvine, Robert Mayes, Fy.	*Framingham, Mass.*	303 Oak Hall

Jeffery, James Arthur Allen, Fy.	*North Vassalboro*	56 North Main Street
Jewell, Dorcas Grace, He.	*Orono*	47 Mill Street
Jewell, Duncan Henry, Agr.	*Orono*	47 Mill Street
Jewett, Virginia Choate, He.	*Westport*	The Maples
Johnson, Glenna Mae, He.	*Ashville*	North Hall
Johnson, Vernon Elbert, Fy.	*Milford*	Milford
Johnston, Robert Edson, Agr.	*Easton*	104 Oak Hall
Jones, Harry Martin, Agr.	*Old Orchard*	401 H. H. Hall
Jones, Margaret Louise, He.	*Orono*	164 College Road
Jordan, Harold John, Me.	*Augusta*	408 Oak Hall
Kelley, Lawrence Babbitt, Pa.	*Bellows Falls, Vt.*	404 H. H. Hall
Kennedy, Clair Arthur, Ch.Eng.	*South Brooksville*	64 Penobscot Street
Kenoyer, Robert Evert, Ee.	*Weeks Mills*	56 North Main Street
Kent, Vernon Franklin, Arts	*Fort Kent*	404 H. H. Hall
Ketchum, Frank Wentworth, Agr.	*Houlton*	Poultry Experiment Plant
Kilas, Joseph, Pa.	*Rumford*	404 H. H. Hall
Kimball, Everett Augustus, Arts	*Hampden*	Cottage Street, Hampden
Kinghorn, Robert Colin, Fy.	*Fitchburg, Mass.*	307 H. H. Hall
Kingsbury, Walton Cameron, Fy.	*Boonville, N. Y.*	34 Pine Street
Kleiner, Borris, Ch.	*Bangor*	442 Hammond Street, Bangor
Knapp, Archie Fred, Jr., Me.	*Yarmouth*	86 Mill Street
Knapp, Phyllis Lucy, He.	*Bradley*	Bradley
Kneeland, Frank Henry, Arts	*Searsport*	312 Oak Hall
Knights, Maxine Sherwin, He.	*Brewer*	166 Church Street, Brewer
Kozicky, Edward Louis, Fy.	*Eatontown, N. J.*	201 H. H. Hall
Kuhn, Louis Joseph, Ch.Eng.	*Yonkers, N. Y.*	47 Mill Street
Ladd, Leon Fairclough, Ee.	*Lewiston*	395 College Road
Lancaster, Hartwell Charles, Me.	*Old Town*	154 Stillwater Avenue, Old Town
Larsson, Robert Dustin, Ce.	*Gloucester, Mass.*	47 Mill Street
Leek, Spencer Simmons, Agr.	*Bangor*	61 Hersey Avenue, Bangor
Leining, Charles Frederick, Arts	*Mt. Vernon, N. Y.*	301 Oak Hall
Levin, Evelyn Rae, Arts	*Meriden, Conn.*	The Elms
Levine, Harold Poorvu, Agr.	*Waterville*	101 H. H. Hall

Libby, Clifford White, Fy.	*Portland*	35 Grove Street
Libby, Lewis Simpson, Jr., Arts	*Milford*	Milford
Libby, Philip Judson, Eng.	*Freedom*	430 College Road
Linnell, Ruth Howe, Arts	*Pembroke*	North Hall
Lobley, Frank Merrill, Arts	*Bangor*	498 Main Street, Bangor
London, Mansfield Gray, Agr.	*Houlton*	Stillwater
Look, Eleanor Carolyn, Arts	*Rockland*	The Maples
Lord, Lyman Locke, Agr.	*Charleston*	208 H. H. Hall
Lord, Nathaniel Nelson, Arts	*Wells*	411 H. H. Hall
Lovejoy, Robert John, Ee.	*Farmington*	208 Oak Hall
Luce, Elizabeth Stanford, Arts	*Cohasset, Mass.*	The Maples
Lund, David Rolf, Ch.Eng.	*Norwalk, Conn.*	210 H. H. Hall
Lusk, Hugh Ferrel, Fy.	*Quincy, Mass.*	201 Oak Hall
Lymburner, Louis Blaine, Agr.	*North Brooksville*	25 Grove Street
McAlary, Elizabeth Mary, He.	*Rockland*	The Maples
McAllister, Joan, By.	*Gorham*	The Maples
McDonough, Jean Ellin, Arts	*Portland*	The Maples
McEachern, John Francis, Fy.	*Bangor*	82 Center Street, Bangor
McEdward, James Angus, Eng.	*Union*	210 H. H. Hall
MacGregor, Robert Malcolm, Me.	*Plattsburgh, N. Y.*	402 H. H. Hall
McIntire, Edith Blanche, Arts	*Dixfield*	North Hall
McKay, Gordon Bush, Ch.Eng.	*Old Town*	64 Bradbury Street, Old Town
McLaughlin, Lewis Reuben, Agr.	*Limestone*	211 Oak Hall
McMahon, George Nelson, Eng.	*Brewer*	89 State Street, Brewer
McPheters, Robert Douglas, Ch.Eng.	*Bar Harbor*	148 Main Street
Mack, Betty C., Arts	*Bangor*	The Maples
Mackay, Bruce Albert, Ch.Eng.	*Winter Harbor*	306 H. H. Hall
Mann, Alfred Airoy, Ch.Eng.	*Raymond*	109 H. H. Hall
Marriner, Norman Earle, Ch.Eng.	*Camden*	210 Oak Hall
Marsh, Edward Livingston, Ce.	*Brighton, Mass.*	403 H. H. Hall
Marshall, Douglas Harold, Arts	*Portland*	35 Grove Street
Merrill, Janice, Arts	*East Eddington*	75 Kenduskeag Avenue, Bangor
Meserve, Philmore Windsor, Fy.	*Auburn*	203 Oak Hall
Meserve, Phyllis, He.	*Auburn*	North Hall
Millay, Harold Sidney, Eng.	*Richmond*	110 Oak Hall
Miller, Marion Flint, He.	*Thomaston*	87 Main Street
Mitchell, Shirley Martha, He.	*Fairfield*	The Maples

Monohon, Paul Jordan, Eng.	*North Attleboro, Mass.*	102 Oak Hall
Montgomery, Joshua Black, Arts	*Bucksport*	304 H. H. Hall
Moore, Robert Myles, Fy.	*Orland*	3 Park Street
Morang, Robert Cowley, Agr.	*Wiscasset*	109 H. H. Hall
Morris, Robert Irving, Eng.	*Bangor*	45 Maple Street, Bangor
Morse, Carroll Edwin, Me.	*Bath*	109 H. H. Hall
Mosher, Mary Elizabeth, He.	*Bangor*	The Maples
Mosher, Paul Newell, Agr.	*Dryden*	25 Grove Street
Munro, Alexander George, Jr., Arts	*Houlton*	110 Oak Hall
Murphy, Hugh Jerome, Agr.	*Fort Fairfield*	111 Oak Hall
Murphy, Maurice Mills, Fy.	*Portland*	15 Park Street
Murray, George Leslie, Pa.	*Newport*	111 Oak Hall
Murray, Gordon Pennell, Arts	*Madison*	406 Oak Hall
Murray, Patricia Elizabeth, Arts	*Orono*	212 Main Street
Mussenden, William Frederick, Ch.Eng.	*Bath*	111 H. H. Hall
Mutty, Edwin Louis, Arts	*Bangor*	168 Grove Street, Bangor
Muzroll, Lawrence Joseph, Arts	*Rumford*	111 H. H. Hall
Myers, Clyde Edmund, Arts	*Orono*	33 Spencer Avenue
Newcomb, Frederick Melville, Agr.	*Scarboro*	111 H. H. Hall
Newhall, Carl Alvin, Jr., Ce.	*Peabody, Mass.*	111 H. H. Hall
Nichols, Malcolm George, Fy.	*Stillwater*	Stillwater
Nichols, Margaret Jane, Arts	*Stillwater*	Stillwater
North, Frances Reid, Arts	*Oxford*	The Maples
Nystrom, George Leonard, Pa.	*Plainville, Conn.*	201 Oak Hall
Oakes, Stewart Francis, Ch.Eng.	*Rangeley*	207 Oak Hall
Oaksford, Homer Hollett, Jr., Fy.	*Gloversville, N. Y.*	209 H. H. Hall
Oberly, Mary Carol, Arts	*Augusta*	164 College Road
Olsson, Henry Richard, Ch.Eng.	*Lynnfield Center, Mass.*	209 H. H. Hall
Oppenheim, Edward Elliot, Arts	*Rumford*	110 H. H. Hall
Orff, Barbara Alice, He.	*Rockland*	The Maples
Osgood, Burt Sterling, Jr., Arts	*Orono*	134 College Road
Parsons, Charles Boone, Agr.	*Presque Isle*	107 Oak Hall
Parsons, William Frazier, Ch.Eng.	*Skowhegan*	207 Oak Hall
Pattee, Clifford Henry, Ee.	*Easton*	104 H. H. Hall
Patterson, William, Jr., Ee.	*Thornwood, N. Y.*	209 H. H. Hall
Paul, Roger Fernald, Fy.	*York Beach*	36 College Road

Libby, Clifford White, Fy.	*Portland*	35 Grove Street
Libby, Lewis Simpson, Jr., Arts	*Milford*	Milford
Libby, Philip Judson, Eng.	*Freedom*	430 College Road
Linnell, Ruth Howe, Arts	*Pembroke*	North Hall
Lobley, Frank Merrill, Arts	*Bangor*	498 Main Street, Bangor
London, Mansfield Gray, Agr.	*Houlton*	Stillwater
Look, Eleanor Carolyn, Arts	*Rockland*	The Maples
Lord, Lyman Locke, Agr.	*Charleston*	208 H. H. Hall
Lord, Nathaniel Nelson, Arts	*Wells*	411 H. H. Hall
Lovejoy, Robert John, Ee.	*Farmington*	208 Oak Hall
Luce, Elizabeth Stanford, Arts	*Cohasset, Mass.*	The Maples
Lund, David Rolf, Ch.Eng.	*Norwalk, Conn.*	210 H. H. Hall
Lusk, Hugh Ferrel, Fy.	*Quincy, Mass.*	201 Oak Hall
Lymburner, Louis Blaine, Agr.	*North Brooksville*	25 Grove Street
McAlary, Elizabeth Mary, He.	*Rockland*	The Maples
McAllister, Joan, By.	*Gorham*	The Maples
McDonough, Jean Ellin, Arts	*Portland*	The Maples
McEachern, John Francis, Fy.	*Bangor*	82 Center Street, Bangor
McEdward, James Angus, Eng.	*Union*	210 H. H. Hall
MacGregor, Robert Malcolm, Me.	*Plattsburgh, N. Y.*	402 H. H. Hall
McIntire, Edith Blanche, Arts	*Dixfield*	North Hall
McKay, Gordon Bush, Ch.Eng.	*Old Town*	64 Bradbury Street, Old Town
McLaughlin, Lewis Reuben, Agr.	*Limestone*	211 Oak Hall
McMahon, George Nelson, Eng.	*Brewer*	89 State Street, Brewer
McPheters, Robert Douglas, Ch.Eng.	*Bar Harbor*	148 Main Street
Mack, Betty C., Arts	*Bangor*	The Maples
Mackay, Bruce Albert, Ch.Eng.	*Winter Harbor*	306 H. H. Hall
Mann, Alfred Alroy, Ch.Eng.	*Raymond*	109 H. H. Hall
Marriner, Norman Earle, Ch.Eng.	*Camden*	210 Oak Hall
Marsh, Edward Livingston, Ce.	*Brighton, Mass.*	403 H. H. Hall
Marshall, Douglas Harold, Arts	*Portland*	35 Grove Street
Merrill, Janice, Arts	*East Eddington*	75 Kenduskeag Avenue, Bangor
Meserve, Philmore Windsor, Fy.	*Auburn*	203 Oak Hall
Meserve, Phyllis, He.	*Auburn*	North Hall
Millay, Harold Sidney, Eng.	*Richmond*	110 Oak Hall
Miller, Marion Flint, He.	*Thomaston*	87 Main Street
Mitchell, Shirley Martha, He.	*Fairfield*	The Maples

Monohon, Paul Jordan, Eng.	*North Attleboro, Mass.*	102 Oak Hall
Montgomery, Joshua Black, Arts	*Bucksport*	304 H. H. Hall
Moore, Robert Myles, Fy.	*Orland*	3 Park Street
Morang, Robert Cowley, Agr.	*Wiscasset*	109 H. H. Hall
Morris, Robert Irving, Eng.	*Bangor*	45 Maple Street, Bangor
Morse, Carroll Edwin, Me.	*Bath*	109 H. H. Hall
Mosher, Mary Elizabeth, He.	*Bangor*	The Maples
Mosher, Paul Newell, Agr.	*Dryden*	25 Grove Street
Munro, Alexander George, Jr., Arts	*Houlton*	110 Oak Hall
Murphy, Hugh Jerome, Agr.	*Fort Fairfield*	111 Oak Hall
Murphy, Maurice Mills, Fy.	*Portland*	15 Park Street
Murray, George Leslie, Pa.	*Newport*	111 Oak Hall
Murray, Gordon Pennell, Arts	*Madison*	406 Oak Hall
Murray, Patricia Elizabeth, Arts	*Orono*	212 Main Street
Mussenden, William Frederick, Ch.Eng.	*Bath*	111 H. H. Hall
Mutty, Edwin Louis, Arts	*Bangor*	168 Grove Street, Bangor
Muzroll, Lawrence Joseph, Arts	*Rumford*	111 H. H. Hall
Myers, Clyde Edmund, Arts	*Orono*	33 Spencer Avenue
Newcomb, Frederick Melville, Agr.	*Scarboro*	111 H. H. Hall
Newhall, Carl Alvin, Jr., Ce.	*Peabody, Mass.*	111 H. H. Hall
Nichols, Malcolm George, Fy.	*Stillwater*	Stillwater
Nichols, Margaret Jane, Arts	*Stillwater*	Stillwater
North, Frances Reid, Arts	*Oxford*	The Maples
Nystrom, George Leonard, Pa.	*Plainville, Conn.*	201 Oak Hall
Oakes, Stewart Francis, Ch.Eng.	*Rangeley*	207 Oak Hall
Oaksford, Homer Hollett, Jr., Fy.	*Gloversville, N. Y.*	209 H. H. Hall
Oberly, Mary Carol, Arts	*Augusta*	164 College Road
Olsson, Henry Richard, Ch.Eng.	*Lynnfield Center, Mass.*	209 H. H. Hall
Oppenheim, Edward Elliot, Arts	*Rumford*	110 H. H. Hall
Orff, Barbara Alice, He.	*Rockland*	The Maples
Osgood, Burt Sterling, Jr., Arts	*Orono*	134 College Road
Parsons, Charles Boone, Agr.	*Presque Isle*	107 Oak Hall
Parsons, William Frazier, Ch.Eng.	*Skowhegan*	207 Oak Hall
Pattee, Clifford Henry, Ee.	*Easton*	104 H. H. Hall
Patterson, William, Jr., Ee.	*Thornwood, N. Y.*	209 H. H. Hall
Paul, Roger Fernald, Fy.	*York Beach*	36 College Road

Payson, Carlton Burkett, Agr.	*Union*	College Road
Peaslee, Elizabeth Frances, He.	*Concord, N. H.*	The Maples
Peavey, Harry Clothey, Jr., Eng.	*Fort Sam Houston, Texas*	209 H. H. Hall
Peirce, Jean Margaret, He.	*Bangor*	205 Elm Street, Bangor
Pennell, John Dunning, Jr., Ch.	*Portland*	34 Pine Street
Perkins, Alfred Read, Fy.	*Augusta*	308 Oak Hall
Perkins, Charlene Mary, Arts	*Madison*	The Elms
Perkins, Howard Roscoe, Ce.	*Orono*	80 North Main Street
Perry, Clifford Given, Ce.	*Bowdoinham*	25 Grove Street
Perry, Leona Mary, He.	*Jefferson*	North Hall
Perry, Lionel Alvah, Agr.	*Sherman Mills*	6 North Main Street
Philbrook, Constance Fanny, He.	*Shelburne, N. H.*	The Maples
Philbrook, Margaret Elizabeth, Arts	*Tenafly, N. J.*	The Maples
Pierce, Richard Herd, Fy.	*Leominster, Mass.*	212 H. H. Hall
Pierter, Martin Fredrick, Ch.	*Lisbon Falls*	384 College Road
Pike, Ruth Avery, Arts	*Rockland*	82 Main Street
Pineo, Priscilla, Arts	*Milo*	The Maples
Pinkham, Ernestine King, Arts	*Portland*	The Maples
Piper, Allan Eugene, Agr.	*Troy*	25 Grove Street
Plummer, Richard Frank, Ch.Eng.	*Lisbon*	211 H. H. Hall
Pomeroy, Yvonne Anna, Arts	*Hampden Highlands*	Hampden Highlands
Powers, Roland Linwood, Fy.	*Medway*	25 Grove Street
Pratt, Virgil Stewart, Fy.	*Skowhegan*	8 Barker Street, Bangor
Preble, Claralyn Owen, Arts	*Enfield*	10 Oak Street, Old Town
Preble, Clayton Hinckley, Ee.	*Addison*	211 H. H. Hall
Pullen, Winston Eugene, Agr.	*Monson*	192 Webster Avenue, Bangor
Ramsdell, Richard Theodore, Fy.	*Milton, Mass.*	310 H. H. Hall
Rand, Emily Allen, Arts	*Bangor*	14 Frances Street, Bangor
Rand, Roberta Elizabeth, Arts	*Old Town*	84 Jefferson Street, Old Town
Reed, Ruth Helena, He.	*Madawaska*	The Maples
Reed, Walter Sherwood, Jr., Ch.Eng.	*Boothbay Harbor*	405 Oak Hall
Reid, Elizabeth Stanley, Arts	*Bangor*	The Maples
Reilley, James Richard, Fy.	*Tottenville, Staten Island, N. Y.*	409 H. H. Hall
Reitz, John Addison, Ce.	*Watertown, Mass.*	401 Oak Hall

Riddle, Oscar Walter, Eng.	*Rangeley*	310 H. H. Hall
Riddle, William James, Ch.Eng.	*Bridgton*	310 H. H. Hall
Riley, Pauline Frances, Arts	*Biddeford*	The Maples
Risman, George Carl, Fy.	*Roxbury, Mass.*	110 H. H. Hall
Roach, Harry Quinton, Agr.	*Smyrna Mills*	206 H. H. Hall
Robertson, Frank O'Neil, Jr., Arts	*Bethel*	108 Oak Hall
Robertson, Kenneth Noble, Ge.	*Auburn*	203 Oak Hall
Robinson, Leslie Tyler, Arts	*Sherman Station*	80 North Main Street
Rollins, Maynard Francis, Fy.	*Ogunquit*	405 Oak Hall
Rollins, Virginia Louise, Arts	*Greenville Junction*	The Maples
Romero, Margaret Robinson, Arts	*Bangor*	32 North Street, Bangor
Rosenberg, Alan Warren, Arts	*Newton Centre, Mass.*	411 Oak Hall
Ross, Annie Estella, He.	*West Lubec*	North Hall
Rothenberg, Howard Rueben, Arts	*Brooklyn, N. Y.*	110 H. H. Hall
Rowe, Elizabeth Gould, He.	*Milo*	North Hall
Rowe, Hilda Barton, Arts	*Bangor*	The Maples
Rubin, Sylvia Anna, Arts	*Bangor*	312 French Street, Bangor
Sanborn, Bert Sumner, Fy.	*North Uxbridge, Mass.*	411 H. H. Hall
Saunders, Donald Arthur, Ch.Eng.	*Rockland*	405 H. H. Hall
Savage, Harriett duBois, Arts	*Lyndhurst, N. J.*	The Maples
Sawyer, Frances Lenora, He.	*Waterville*	The Maples
Scammon, Claudia Alecia, Arts	*Orono*	121 North Main Street
Scanlin, Merlin Thomas, Agr.	*Weston*	24 Main Street
Serota, Jacob, Fy.	*Portland*	312 H. H. Hall
Shackelford, Charles Henry, Fy.	*Wenham, Mass.*	408 H. H. Hall
Shaw, Delmar Daniel, Jr., Me.	*Scarboro*	407 Oak Hall
Shearer, Frank Price, Fy.	*Pennington, N. J.*	309 H. H. Hall
Shepard, Leroy Grenville, Eng.	*Deer Isle*	15 Mill Street
Sherman, Charles Merrill, Arts	*Pembroke, Mass.*	60 Forest Avenue
Sherman, Maurice Alvin, Fy.	*Southport*	395 College Road
Silverman, David, Arts	*Portland*	411 Oak Hall
Simpson, Eloise Pratt, Arts	*Attleboro, Mass.*	The Maples
Skoufis, Peter John, Arts	*Bangor*	18 Lincoln Street, Bangor
Smart, Madeline Marie, He.	*Houlton*	North Hall
Smith, Charles Byron, Jr., Agr.	*Orono*	39 Park Street
Smith, James Fredrick, Ee.	*Richmond, Va.*	303 H. H. Hall
Smith, Julia Alice, He.	*South Parsonsfield*	North Hall

Smith, Owen Halbert, Agr.	*Presque Isle*	206 Oak Hall
Smith, Robert Butman, Arts	*South Portland*	Stillwater
Smith, Sherman King, Arts	*Gardiner*	309 H. H. Hall
Smith, Thomas Joseph, Jr., Ch.Eng.	*West Haven, Conn.*	309 H. H. Hall
Sobel, Isadore Theodore, Fy.	*New York, N. Y.*	395 College Road
Somes, John William, Arts	*Mount Desert*	7 Kell Street
Soule, Jean Harriet, He.	*Charleston*	The Elms
Staples, Grant Dockendorff, Eng.	*Whitefield*	109 H. H. Hall
Staples, Ormond, Fy.	*Camden*	210 Oak Hall
Starbird, Clinton Virgil, Me.	*Strong*	208 Oak Hall
Starkey, Raymond Herman, Ee.	*York Harbor*	412 Oak Hall
Stearns, Roger Austin, Fy.	*South Paris*	402 Oak Hall
Stetson, William Strickland, Arts	*Bangor*	24 Grove Street, Bangor
Stevens, Clifford Alton, Fy.	*Lincoln*	410 Oak Hall
Stevens, John Rufus, Agr.	*Smyrna Mills*	26 Davis Street, Old Town
St. Germain, William Albert, Me.	*Greenville*	412 H. H. Hall
Stilphen, Olive Mary, Arts	*Richmond*	The Maples
Stisulis, Walter Lewis, Ce.	*Mexico*	102 H. H. Hall
Stone, Richard Maynard, Me.	*Portland*	60 Forest Avenue
Storer, Allan Philbrick, By.	*Freedom*	311 H. H. Hall
Strang, Walter Pershing, Fy.	*Madison*	407 Oak Hall
Strout, Roger Philip, Me.	*Grosse Ile, Mich.*	311 H. H. Hall
Stubbs, Charlton Percival, Me.	*Bucksport*	311 H. H. Hall
Sullivan, Richard Paul, Me.	*Portland*	395 College Road
Swett, Arthur Howard, Arts	*Newport*	College Road
Tackaberry, Robert Bernard, Me.	*Old Town*	28 Davis Street, Old Town
Talbot, James Edward, Fy.	*Woodland*	410 H. H. Hall
Talbot, Richard Morris, Ce.	*Erie, Pa.*	301 H. H. Hall
Tarbell, Allan Brown, Arts	*Smyrna Mills*	410 Oak Hall
Taylor, Charles Evans, Arts	*Belfast*	395 College Road
Theriault, Clayton William, Ch.	*Howland*	24 Oak Street
Thomas, Camilla Angeline, He.	*Oakfield*	The Elms
Thompson, Esther LaDora, Arts	*Biddeford*	32 College Road
Thompson, Vinal Ernest, Agr.	*Easton*	104 Oak Hall
Thurston, William Henry, Arts	*Foxboro, Mass.*	60 Park Street
Townsend, Paul Alexander, Arts	*Blue Hill*	410 H. H. Hall
Tracy, Frederick Foster, Ch.Eng.	*Northeast Harbor*	410 H. H. Hall
Tracy, Samuel Edwin, Jr., Arts	*Northeast Harbor*	412 H. H. Hall

Treadwell, Jane Elizabeth, Ch.	*Salem, Mass.*	The Maples
Troop, Benjamin Sabin, Fy.	*West Hartford, Conn.*	206 Oak Hall
Trott, Margaret Elizabeth, Arts	*Bath*	The Maples
Trowbridge, John Perrin, Ce.	*Pomfret Center, Conn.*	406 H. H. Hall
Tucker, Herbert Walter, Fy.	*Cherryfield*	209 Oak Hall
Tufts, Christine Evelyn, Arts	*Kingfield*	North Hall
Tweedie, James Kerr, Arts	*Lamoine*	103 H. H. Hall
Upcott, Dorothy Lavinia, Arts	*Orono*	20 Forest Avenue
Utterback, John Dudley, Ge.	*Bangor*	209 Oak Hall
Valliere, Raymond Andrew, Arts	*South Berwick*	24 Oak Street
Veinot, Richard Henry, Me.	*Waterville*	303 H. H. Hall
Verrill, Anna Elizabeth, He.	*Cumberland Mills*	The Maples
Violette, Frances Lima, Arts	*Balboa, Canal Zone*	The Maples
Volkman, Wallace Harry, Ee.	*West Somerville, Mass.*	395 College Road
Walker, Alexander, Jr., Fy.	*Rochester, N. Y.*	60 Forest Avenue
Walker, James Horace, Me.	*Lyman*	395 College Road
Walker, Neal Harvey, Agr.	*Wiscasset*	35 Park Street
Wall, Robert Hanley, Ee.	*Wells*	395 College Road
Walsh, Agnes Ann, Arts	*South Portland*	North Hall
Warren, David Wyman, Jr., Arts	*Pripet*	412 H. H. Hall
Watters, Alwyn Signa, Me.	*Madawaska*	409 H. H. Hall
Webster, June Anna, He.	*Bangor*	435 Union Street, Bangor
Webster, Shirley Gwynne, Me.	*Lincoln*	352 Ohio Street, Bangor
West, Dora Brown, Arts	*Lexington, Mass.*	The Elms
Weston, Donald Williams, Ee.	*Madison*	Kell Street
Weymouth, Flora Gwendolyn, Arts	*Howland*	The Maples
Wheeler, Francis Adams, Eng.	*Auburn*	305 Oak Hall
White, Charlotte Zeluma, Arts	*Bowdoinham*	The Maples
White, Howard Colon, Me.	*Hulls Cove*	148 Main Street
White, Mildred Cecelia, Arts	*Old Town*	Costigan
White, Ruth Elizabeth, Arts	*Bangor*	The Elms
Whitehouse, Marjorie Marion, Arts	*Augusta*	32 College Road
Whitman, Forrest Giles, Fy.	*East Auburn*	207 H. H. Hall
Whitney, Byron VanBleck, Arts	*Winn*	25 Grove Street
Whitten, Maurice Harvard, Agr.	*Mars Hill*	305 H. H. Hall

Wilbur, Gorham Homer, Me.	*Dexter*	College Road
Willets, Robert Taber, Fy.	*Roslyn, L. I., N. Y.*	309 H. H. Hall
Willey, Roslyn Bradford, Agr.	*Waterville*	25 Grove Street
Williams, Frank Raymond, Arts	*Mechanic Falls*	7 Kell Street
Williams, James Oliver, Ce.	*Ogunquit*	305 Oak Hall
Winchell, Eleanor Boyd, Arts	*Bangor*	79 Fourth Street, Bangor
Wing, Dorothy Hopkins, He.	*Bath*	The Maples
Winslow, Paul Lee, Eng.	*Norridgewock*	109 Oak Hall
Wood, Edward Henry, Fy.	*Newburyport, Mass.*	212 H. H. Hall
Woodbrey, Cecil Sherman, Eng.	*Sebago Lake*	403 Oak Hall
Woolley, Thomas Russell, Jr., Ee.	*Bridgton*	411 H. H. Hall
Wooster, Ruth, He.	*Old Town*	258 Center Street, Old Town
Wormwood, Helen Bradbury, Arts	*Portland*	The Maples
Wyman, Paul Hoxie, Arts	*Waterville*	306 Oak Hall
Young, Barbara Alice, Arts	*Calais*	The Maples
Zieno, Angelo Salvatore, Fy.	*Norwich, N. Y.*	312 H. H. Hall
Zitaner, Morris, Arts	*Brewer*	R.F.D. #8, South Brewer

SPECIALS

Adamson, Gilbert Ercel, Pa.	*Ottawa, Ont., Canada*	Stillwater
Blaisdell, Tedford Madison, Me.	*Franklin*	Σ X House
Brann, William Henry, Eng.	*Gardiner*	K Σ House
Brarmann, Edward Francis, Ht.	*Englewood, N. J.*	A T Ω House
Bullard, Edward Chesseldon, Eng.	*Glens Falls, N. Y.*	A T Ω House
Chase, Lewis Arthur, Es.	*Brewer*	R.F.D. #5, Brewer
Cooper, John Newton, Eng.	*Hancock Point*	36 College Road
Eames, Stanley Baker, Arts	*Bingham*	395 College Road
Edison, Harold, Ch.A.	*Brooklyn, N. Y.*	12 Pleasant Street
Farrell, Thomas James, Ed.	*Portland*	St. Mary's Rectory, Old Town
Gilbert, Calvin Robinson, Es.	*Oakland*	50 Hill Street
Gould, Philip Harriman, Zo.	*Bucksport*	25 Grove Street
Graffam, Robert Thomas, Ch.Eng.	*Portland*	3 Park Street
Graham, Pauline Alwilda, Arts	*Hampden Highlands*	Hampden Highlands

Hagensen, Philip Leonard, Ce.	*Bangor*	38 Sixth Street, Bangor
Halliwill, Eugene Herbert, Me.	*Portland*	395 College Road
Henry, Dorothy Eleanor, Arts	*Somerville, N. J.*	College Road
Hitchner, Barbara Dunn, Ed.	*Orono*	51 Bennoch Street
Hussey, Freeman Lincoln Otis, Zo.	*Bradley*	Bradley
Kelley, Eric Winslow, Fm.	*South Portland*	103 Mill Street
Leavitt, Charles Ralph, Ce.	*West Enfield*	Φ K Σ House
Leavitt, Ruth Madeline, Py.	*Old Town*	426 Center Street, Old Town
McMahon, Owen John, Eng.	*Bangor*	44 East Summer Street, Bangor
McReynolds, Miriam Irene, Arts	*Orono*	66 College Road
Maclay, Mark Walton, Fy.	*New York, N. Y.*	Σ N House
Milliken, Cooper, Eng.	*Old Town*	14 Oak Street, Old Town
Mochcovitch, David, Pa.	*Rio de Janeiro, Brazil*	T E Φ House
Morrell, Harry Elmer, Arts	*Brunswick*	Δ T Δ House
Mosher, Howard Cornell, Ch.	*Stillwater*	Spring Street, Stillwater
Parshley, Elsa Madison, Zo.	*Orono*	33 Bennoch Street
Perry, Orin Francis, Ch.	*Dobbs Ferry, N. Y.*	K Σ House
Perry, Ruth Elizabeth, He.	*Orono*	39 Pine Street
Plaisted, Leigh Charles, An.	*Orono*	Farm Boarding House
Potter, Linwood Cecil, Es.	*Bar Harbor*	Bangor Theological Seminary, Bangor
Prince, Vinton McIntire, Eng.	*Kittery*	87 Park Street
Sawyer, Clayton Leonard, Ch.A.	*Orono*	Park Street
Sheedy, John Richmond, Eng.	*Groton, Mass.*	Φ Γ Δ House
Striar, Abraham, Ch.	*Bangor*	Windsor Hotel, Bangor
Treat, George Currier, Eng.	*Bangor*	66 Kenduskeag Avenue, Bangor
Willey, Baxter Leone, Ch.Eng.	*Cherryfield*	111 Park Street
Witter, John Franklin, Bc.	*Orono*	66 College Road
Woodman, Bruce Coffin, Fy.	*Machias*	409 H. H. Hall

TWO-YEAR COURSE IN AGRICULTURE

First Year

Allen, Delmont Charles	*Presque Isle*	47 Mill Street
Bishop, Robert Edward	*Caribou*	66 Park Street

Boulos, Joseph Sebastion	*Portland*	412 Oak Hall
Burpee, Howard Lemuel	*Orono*	Bennoch Road
Conley, Edward Merrill, Jr.	*Monmouth*	11 Beech Street
Dunning, Clement Stevens	*North Harpswell*	Bennoch Road
Dyer, Wesley James	*Norway*	56 North Main Street
Elwell, Ralph Horatio	*Brooks*	25 Grove Street
Farrington, Harold Edward, Jr.	*Portland*	Α Γ Ρ House
Ford, Wendell Robert	*Westfield*	25 Grove Street
Gordon, John Henry	*Dexter*	25 Grove Street
Hall, Clinton Newell	*Harrington*	309 Oak Hall
Howe, Charles Leonard	*Kingfield*	25 Grove Street
Hunt, Norman Earl	*Clinton*	25 Grove Street
Kimball, Gerald Winston	*Bangor*	11 Beech Street
McCrum, Don Lemuel	*Mars Hill*	210 H. H. Hall
Martin, Alton Robert	*Stetson*	25 Grove Street
Meara, Richard Courtney	*Poughkeepsie, N. Y.*	86 Mill Street
Snell, Henry Ambrose	*Gorham*	309 H. H. Hall
St. Lawrence, Mitchell Bradley	*Orono*	27 Myrtle Street
Stritter, Karl Witmer	*Nahant, Mass.*	311 H. H. Hall
Sylvester, Fredrick Hudson	*Ashland*	College Road
Taylor, Stewart Glenwood	*Cape Elizabeth*	395 College Road
Thompson, George Edward	*Prentiss*	25 Grove Street
True, Frank Asia	*Springfield*	25 Grove Street
Twitchell, LaForest George	*Bryant Pond*	25 Grove Street

Second Year

Andrews, Willard Harding	*Auburn*	25 Grove Street
Choate, Donald Turner	*Weeks Mills*	Α Γ Ρ House
Cornish, Alfred Cumston	*Brunswick*	Δ Τ Δ House
Davis, Otis Marshall	*Caribou*	Σ Ν House
Dolloff, Alton Livingston	*Rumford Center*	5 Forest Avenue
Goode, Raymond Merlin	*Bangor*	228 Palm Street, Bangor
Grant, James Parker	*Bangor*	59 Sixteenth Street, Bangor
Heald, Erwin Lovett	*Lincolnville*	134 College Road
Huff, Almon Homer	*South Portland*	Α Γ Ρ House
Jacobs, John Philip	*Caribou*	Σ Ν House
King, Charles Henry	*Brewer*	43 Main Street
Pearson, Robert Hill	*Kennebunkport*	45 Mill Street
Reny, Leonard James	*Waterville*	25 Grove Street

Scott, Edward Conant	*Presque Isle*	Φ H K House
Smith, Frank Arthur	*Presque Isle*	Φ H K House
Torrey, Gale Stickney	*Auburn*	A Γ P House
Watkins, William Bell, Jr.	*Berryville, Va.*	Σ N House
Wilson, Adam Winslow	*Portland*	Φ K Σ House

SHORT COURSE IN AGRICULTURE

Unit No. 1

Allen, Ernest William	*Seboeis*	Seboeis
Elliott, Donald Robert	*Millinocket*	60 Forest Avenue
Holman, Marion Lawrence	*Dixfield*	24 Peters Street
Larson, Arthur Theodore	*Brownville*	69 Forest Avenue
Marshall, Walter Shirley	*Searsport*	91 Grant Street, Bangor
Oakes, Carroll Eugene	*Bangor*	Essex Street, Bangor
Putnam, Neal Clifford	*Monroe*	439 North Main Street, Brewer
Searles, Robert James	*Brownville*	69 Forest Avenue
Stetson, Donald Charles	*Mt. Vernon*	121 North Main Street
Taylor, Chancy Isaac	*Norridgewock*	Stillwater
Twombly, Arno Wayne	*Howland*	Howland
Warchalowski, Leo John	*Lisbon*	Stillwater

SPRING SEMESTER, 1938

New Registrations

Graduate Students

Morrison, George Ira, B.S. in Ed., Ed. Maine, 1936	*Perry*	6 Gilbert Street
Robert, Robert Pierre, B.S., Ed. U. S. Naval Academy, 1923	*Wiscasset*	20 Grove Street
Wray, Ruth Arline, B.A., Ed. Maine, 1920	*Brewer*	46 Holyoke Street, Brewer

Seniors

Dingwall, Douglas, Ce.	*Presque Isle*	Φ H K House
Voegelin, Adolphine Henrietta, He.	*New York, N. Y.*	Balentine Hall

Juniors

Bannigan, Marguerite Connor, Eh.	*Waterville*	Balentine Hall
Borden, Marion Patricia, Eh.	*South Portland*	Colvin Hall
Bryers, Jerome Jefferson, Fy.	*Rockville Centre, N. Y.*	Σ X House
Nason, Susie Harmon, Ed.	*Brunswick*	60 Park Street
Parlin, Clarence Owen, Ed.	*Starks*	Stillwater
Sawyer, Neil Gould, Py.	*Easton*	Β Θ Π House
Thibodeau, Louis Henry, Rl.	*Rumford*	88 Park Street

Sophomores

Brown, Phyllis Esther, Arts	*Ocean Park*	Colvin Hall
Davis, Edward Everett, Ce.	*Burnham*	18 Oak Street

Freshmen

Lundberg, Robert Nelson, Arts	*Gloucester, Mass.*	211 Oak Hall

Specials

Davies, William Ellis, Arts	*Orono*	8 Juniper Street
Dole, Francis Henry, Ch.	*Bangor*	R.F.D. #2, Bangor
Godwin, H. Buel, Arts	*Orono*	106 North Main Street
Gustin, Dorothy Ida, Ed.	*Bangor*	62½ Maple Street, Bangor
Harmon, Carlyle Henry, Ed.	*Biddeford*	46 College Road
Lord, Richard Newell, Ed.	*Brewer*	74 State Street, Brewer

Two-Year Course in Agriculture

First Year

Dahlin, Russell John	*North Quincy, Mass.*	111 Park Street

SUMMER SESSION, 1937

Students Registered for Graduate Credit

Additon, Loring Ralph, B.S., Ed. Bates, 1926	*Ellsworth*

Aikins, Nelson Brown, B.S., Ms. *Polytechnic, Mont.*
Maine, 1923
Allen, Irene, B.S. in Ed., Hy. *Somerville, Mass.*
Boston University, 1930
Anketell, Richard Nicholas, A.B., Ed. *Canton, Mass.*
Bates, 1926
Annas, Philip Alfred, B.S., Ed. *Belfast*
Bates, 1928

Babbitt, Edith, B.A., Fr. *St. Louis, Mo.*
Carleton, 1897
Becker, Isabel May, A.B., Eh. *Coral Gables, Fla.*
Florida State College for Women, 1928
Benner, Helen Frances, B.A., Eh. *Bangor*
Maine, 1928
Berrie, Winona May, A.B., Eh. *Presque Isle*
Colby, 1931
Berzon, Bernard L., B.A., Sy. *Bangor*
Yeshiva College, 1935
Black, Phyllis Joan, B.S. in Ed., Hy. *Vinalhaven*
Maine, 1937
Blake, Waneta Taylor, A.B., Ed. *Gardiner*
Colby, 1924
Bliss, Amelia Marcia, B.A., Eh. *Island Falls*
Acadia, 1932
Boston, Josiah Winner, B.S., Ed. *Milford, Del.*
St. John's College, 1924
Bradbury, Beulah Marie, B.A., Ed. *Bangor*
Maine, 1932
Brennan, Doris Lillian, A.B., Fr. *Bristol, Conn.*
Vermont, 1932
Brett, Dolores Crescence, B.A., Ms. *Silver Creek, N. Y.*
D'Youville College, 1925
Bridges, Barbara, A.B., Ed. *Waterville*
Colby, 1934
Bridgham, Edward Theodore, B.S., Ed. *Yalesville, Conn.*
Maine, 1926
Brockway, Philip Judd, B.A., Eh. *Orono*
Maine, 1931
Brown, William Sanders, B.S., Pa. *West Sunbury, Pa.*
Slippery Rock State Teachers' College, 1935

Buehrer, Bernardine, A.B., Eh. *Orono*
Texas, 1922

Burke, Frank Valentine, A.B., Ed. *Stoughton, Mass.*
Maine, 1924

Burns, Mary Louise, A.B., Fr. *Milford, Mass.*
Boston University, 1932

Canon, Bertha Violet, B.A., Lt. *Middlefield, Conn.*
Smith, 1912

Carson, Harold Eugene, B.S., Ed. *Guilford*
Colby, 1928

Casavant, Henri Aimé, A.B., Ed. *Augusta*
Bowdoin, 1927

Chambers, Kathleen Rosalind, A.B., Eh. *Ocean Park*
Barnard, 1929

Chase, Lunette Adeline, B.S. in Ed., Ed. *Stroudsburg, Pa.*
East Stroudsburg State Teachers College, 1933

Chase, Newton Kimball, A.B., Hy. *Blue Hill*
Bowdoin, 1933

Chesterton, Allan Bowdoin, B.A., Ed. *Jonesport*
Maine, 1927

Clark, Frederick William, A.B., Hy. *Meriden, Conn.*
Amherst, 1932

Clark, Lois Miller, A.B., Lt. *Willard, Ohio*
Otterbein College, 1921

Clement, Stanley Luther, A.B., Ed. *Howland*
Colby, 1932

Coffin, Ola Grace, A.B., Lt. *Portage*
Bates, 1929

Cole, Arthur Woodbury, B.S., Ed. *Winter Harbor*
Colby, 1923

Cooney, Elizabeth, A.B., Lt. *Rockport, Mass.*
Bates, 1929

Coons, Erwin Leach, B.S., Ms. *Poughkeepsie, N. Y.*
Wesleyan, 1930

Corrigan, Anna Eileen, B.C.S., B.Ed., Ed. *Auburn, R. I.*
Bryant College, 1932; Rhode Island
College of Education, 1934

Cousins, Irene, B.A., Hy. *Brewer*
Maine, 1911

Crossland, Charles Edward, B.S., Es. *Orono*
Maine, 1917

Croxford, Horace Alcander, B.A., Ed. *Old Town*
Maine, 1930
Cunningham, George Snowdeal, B.A. in Ed., Ed. *Whitefield*
Maine, 1933
Cutts, Cecil Jewett, B.A., Ed. *Hartland*
Maine, 1925

Desjardins, Lionel Louis, B.A., Ed. *Old Town*
Maine, 1934
DeWever, James, B.S., Ed. *Danforth*
Bates, 1917
Donald, Edmund William, B.P.E., Ed. *Troy, N. Y.*
Springfield College, 1921
Downs, Walter Alanson, B.S. in Ed., Ed. *Kenduskeag*
Maine, 1935
Drisko, Sewall Marsten, B.S. in Ed., Ed. *Waterboro*
Maine, 1933
Drottar, Stephen John, Ph.B., Hy. *Livermore Falls*
Holy Cross, 1933
Dunfee, Emery Sewell, B.S., Ps. *Monson*
Colby, 1933

Farrington, Ervin Sylvester, B.S., Ed. *Windsor, Conn.*
New Hampshire, 1932
Farris, William M., B.S. in Ed., Ed. *Windsor, Conn.*
Boston University, 1935
Flynt, Willard Curtis, A.B., Ed. *Oakfield*
Colby, 1934
Furlong, Hazel Frances, B.S., Ed. *Gorham, N. H.*
Farmington Normal, 1930

Gardy, Emma Barbara, B.S. in Ed., Ed. *Doylestown, Pa.*
University of Pennsylvania, 1926
Gould, Gladys Marie, B.S., Ed. *Milo*
Maine, 1922
Griffin, Stephen Augustus, B.A., Ed. *Livermore Falls*
Maine, 1922
Guyette, George Francis, Ph.B., Ed. *Woonsocket, R. I.*
Brown, 1928

Hamilton, Leita Esther French, B.A., Hy. *Memphis, Tenn.*
Maine, 1927

Hand, Ruth Adeline, B.S. in Ed., Ed. *Sanford, Fla.*
Florida State College for Women, 1925
Hartwell, Mary Josephine, B.A., Hy. *Old Town*
Maine, 1929
Hayes, Ruth Alberta, B.A., Py. *Mercersburg, Pa.*
Pennsylvania State College, 1935
Hoskin, Edith May, A.B., Ed. *Houlton*
Colby, 1933
Hoctor, Cathryn Rita, B.S. in Ed., Ed. *Old Orchard*
Maine, 1936
Howard, Eugenia, B.A., Eh. *Coral Gables, Fla.*
Shorter College, 1922
Hayhurst, Esther Pratt, B.S. in Ed., *Greenwich, Ohio*
A.M., Hy.
University of Bowling Green, 1930;
University of Michigan, 1935
Holbrook, George Howard, B.S., Pa. *Randolph, Mass.*
Colby, 1936
Husson, Chesley Haywood, B.S. in Ed., Ed. *Bangor*
Salem State Teachers College, 1926
Husson, George Edwin, B.S. in Ed., Ed. *Lynn, Mass.*
Salem State Teachers College, 1935

Jackman, Laura Pearl, B.A., Ed. *Calais*
Maine, 1914
Jenkins, Arland, A.B., Es. *Danforth*
Bates, 1928
Jenkins, William Henry, B.S. in Ed., Ed. *Fort Fairfield*
Maine, 1935
Johnson, Mabel Towle, B.S., Ed. *Claremont, N. H.*
New Hampshire, 1933
Johnson, Margaret Elva, B.A., Ms. *Bangor*
Maine, 1927
Jones, Serena Frances, B.R.E., A.M., Ed. *Portsmouth, N. H.*
Boston University, 1925, 1928
Jordan, Ina, B.Ped., B.A., Hy. *Seal Harbor*
Maine, 1921, 1924

Kealiher, Pauline Elizabeth, A.B., Ed. *Milo*
Colby, 1929
Keith, Philip Edward, B.S., Ed. *Charleston*
Colby, 1926

Kelleher, Harold Eugene, B.A., Ed. *Bangor*
Maine, 1931
Kelley, Norman James, B.S., Ed. *Waterville*
Maine, 1925
Knox, Florence Laura, B.S., Ed. *Richmond*
Maine, 1931

Lautz, Ida Mathilda, B.S. in Ed., Ed. *Buffalo, N. Y.*
Buffalo State Teachers College, 1936
Lenhart, Jean de Baun, B.S., He. *Fair Lawn, N. J.*
Simmons, 1929
Lipman, Miriam Helen, A.B., A.M., Hy. *New York, N. Y.*
Hunter, 1931, 1934
Lowell, Mildred Harriet, A.B., Ed. *Lodi, N. J.*
Lebanon Valley, 1929
Luce, Walter Marvin, A.B., Fr. *Anson*
Bowdoin, 1935
Locke, Anna, A.B., Ed. *Cambridge, Mass.*
Smith, 1935

McGaughy, Clifford Joseph, B.S., Ed. *Presque Isle*
Colby, 1929
Mackay, Catherine Estelle, B.S., Ed. *Cranston, R. I.*
Rhode Island State College, 1930
McLeod, Flora Love, A.B., Eh. *Coral Gables, Fla.*
Alabama, 1913
Marshall, Russell Burgess, B.S., Ed. *Falmouth, Mass.*
Bridgewater State Teachers College, 1928
Meinecke, Charlotte Drummond, B.A., Eh. *Bangor*
Smith, 1928
Merrill, Robert Bates, A.B., Ed. *Waterville*
Colby, 1936
Milbourn, Mildred Bertha, B.A., Ms. *Walton, N. Y.*
Keuka College, 1928
Monroe, Roy Howard, B.S., Ed. *Milo*
Maine, 1935
Mullaney, Ellen Mary, B.A., Ed. *Bangor*
Maine, 1930
Munyan, Viola Iydelle, B.S. in Ed., He. *Salem, Mass.*
Framingham State Teachers College, 1930
Mutty, Marie Josephine, B.A., Ed. *Old Town*
Maine, 1933

Newman, Theresa Rose, B.A., Ed. *New York, N. Y.*
Hunter, 1926
Nottage, Sereen Hamblet, B.S., Ed. *Solon*
Farmington Normal, 1933

O'Brien, Helen Marie, A.B., Eh. *West Somerville, Mass.*
Boston University, 1930
O'Connor, Charles Eugene, B.A., Ed. *East Eddington*
Maine, 1936
Oliver, Velma Katherine, B.A., Eh. *Dexter*
Maine, 1925
Ormsby, Persis, A.B., Ed. *West Townsend, Mass.*
Boston University, 1927

Peck, Esther Alice, B.S. in Ed., Hy. *Mount Carmel, Conn.*
Boston University, 1928
Parke, Doris Elmyra, B.S., Ed. *Bangor*
Farmington Normal, 1930
Percival, Maple Ismay, B.A., Hy. *Dexter*
Maine, 1929
Perkins, Philip Charles, B.S. in Ed., Ed. *Castine*
Maine, 1933
Potter, Elsie Austin, B.A., Hy. *Troy, N. Y.*
New York State Teachers College, 1928
Powell, Floyd Llewellyn, B.S. in Ed., Ed. *Pittsfield*
Maine, 1935
Prescott, Herbert Leroy, A.B., Ed. *Bangor*
Bowdoin, 1930

Quinn, Marion Frances, B.S. in Ed., Ed. *Bangor*
Maine, 1933

Reary, Arthur Robert, B.S., Ed. *Boyertown, Pa.*
Shippensburg State Teachers College, 1933
Reynolds, Arthur Warren, A.B., Ed. *Worcester, Mass.*
Harvard, 1927
Rhodes, Marion Ethel, B.S. in Ed., He. *Attleboro, Mass.*
Framingham State Teachers College, 1930
Ryan, Hugh Edward, B.A., Ms. *Stamford, Conn.*
Maine, 1935

Shaw, Walter Seely, B.S., Ed. *Presque Isle*
Bowdoin, 1936

Saunders, Ethel Stover, B.A., Ed. *Bucksport*
Maine, 1931

Schwenck, Hilda K., Ph.B., Ed. *Boyertown, Pa.*
Muhlenberg, 1934

Smith, Lucille Estelle, B.A., Ed. *Brewer*
Maine, 1921

Snell, John Alden, B.S., Ed. *Hampden Highlands*
Maine, 1927

Spear, Ross Patterson, B.A., Ms. *East Corinth*
Maine, 1930

Springer, William Glen, B.S., Ed. *York Village*
Colby, 1929

Shively, Audrey Peters, B.S., Ed. *Andover, N. H.*
Ohio State, 1920

Stahl, Jeannette Olivia, A.B., Ed. *Camden*
Bates, 1931

Stone, Lois Linnette, B.S., He. *Hilton Village, Va.*
William and Mary, 1931

Storer, Clayton Alton, B.S., Ed. *North Anson*
Maine, 1918

Sutch, Cleora, A.B., Hy. *Scarsdale, N. Y.*
Bryn Mawr, 1915

Sweetser, Lawrence Richardson, B.S., Ed. *Presque Isle*
Maine, 1932

Sylvester, Margaret Edna, B.S., Ed. *Etna*
Maine, 1933

Tomb, James E., A.B., M.Ed., Ed. *Pittsburgh, Pa.*
Muskingum, 1922; Pittsburgh, 1935

Torrey, Ronald Graydon, B.S., Ed. *North Weymouth, Mass.*
Bowdoin, 1933

Walker, Carleton Leslie, A.B., Ed. *Middletown, Conn.*
Bates, 1923

Wall, Lillian Frances, B.A., Ed. *Bangor*
Maine, 1934

Warner, Beryl Elisabeth, B.A., Ms. *Bangor*
Maine, 1935

Welch, Evelyn Cecilia, B.S. in Ed., Ed. *Bangor*
Simmons, 1934

Whitten, Helen Marie, A.B., Eh. *Miami, Fla.*
Florida State College for Women, 1923
Wilder, Carroll Frederick, B.A., Ed. *Cape May Court House, N. J.*
Maine, 1926
Worthington, Esther, B.S., Ed. *Morrisville, Vt.*
Rhode Island State College, 1930
Watt, Arthur, B.S., Ed. *North Easton, Mass.*
Northeastern University, 1928

OTHER SUMMER SESSION STUDENTS, 1937

Abbott, Myrle Sleeper *Bar Harbor*
Adams, Orpha McLaughlin *Rome, N. Y.*
Additon, Elwood Prince *Rumford*
Aikins, Sara Leighton *South Windham*
Allan, Iris Clymenia *South Portland*
Allen, Harold Gates, A.B. *Barre, Mass.*
Amherst, 1913
Allen, Inez Philbrook *Brunswick*
Allen, Willis Hillman, Sr. *East Machias*
Anderson, Helen Margaret *Bangor*
Archibald, Lillian Grace *Portland*
Archibald, Mary Cordelia *Houlton*
Arnold, Frances Elizabeth, B.A., M.A. *Orono*
Maine, 1910, 1923
Austin, Arthur Collin, B.A. *Rochester, N. Y.*
Rochester, 1936

Baldy, Frederic Carroll, B.A., LL.B. *Southborough, Mass.*
Minnesota, 1895, 1898
Barclay, John Hammond *Livermore Falls*
Barden, Gertrude Swasey *Poughkeepsie, N. Y.*
Barone, Louis Nicholas *Quincy, Mass.*
Barrett, Harriet Esther *Sangerville*
Bartlett, Annie Ritchie *Orono*
Barton, Esther Mae *Dixon, Ill.*
Beyer, Bernadine Margaret *Victor, N. Y.*
Blanchard, Charles Louis *Bangor*
Blanchard, Geraldine *Eastport*
Blood, Elson Richard *Belfast*
Bonville, Jeannette Louise *Presque Isle*

Bouchard, Benoit Joseph — *Old Town*
Bouchard, Silvio Leo — *Frenchville*
Bourgoin, Raoul Joseph — *Frenchville*
Bowers, Margaret Anne, A.B., A.M. — *Millington, Md.*
Western Maryland, 1926; Cornell University, 1931
Bowler, Dorothy, Ph.B., M.A. — *Millinocket*
Brown, 1930; Columbia, 1937
Bradbury, Muriel Flossie — *Suncook, N. H.*
Bratton, Katharine Mitchell, B.S., A.M. — *Elkton, Md.*
Johns Hopkins, 1926; Cornell University, 1933
Brill, Marion Lillian — *Silver Creek, N. Y.*
Brooks, Mary Priscilla — *Eastport*
Brookes, William James, A.B., M.A. — *Tuckahoe, N. Y.*
Boston University, 1930; Columbia, 1934
Brown, Janet Audrey — *South Portland*
Buker, Margaret Kathleen — *Pittsfield*
Burdick, Marjorie Janette, A.B., M.A., M.R.E. — *Chagrin Falls, Ohio*
Milton College, 1919; Boston University, 1928, 1929

Calderwood, George Curtis — *Roxbury, Mass.*
Calhoun, Gertrude Eleanor — *Springdale, Conn.*
Campbell, Lydia May — *East Corinth*
Carrillo, Mary Coughlin, B.A., M.A. — *New York, N. Y.*
Maine, 1922; Columbia, 1928
Carter, Annie Corneail — *Ellsworth*
Carter, Bertha Wheeler — *Etna*
Carter, Elton Stewart — *Mapleton*
Carter, Marcia Laurel — *Mapleton*
Carter, Marian Ada, B.A. — *Bangor*
Maine, 1933
Chase, Mabel Laura — *Bar Harbor*
Chasse, Constance Cecilia — *Veazie*
Chow, Ching-Shiang, B.A., M.S. — *Cambridge, Mass.*
National Central Univ., 1926; University of Michigan, 1936
Church, Grace Updegrove, LL.B. — *Stockton Springs*
Portia Law School, 1932
Clark, Lorraine Crosby — *East Cleveland, Ohio*
Clark, Louise May, A.B — *Montague, Mass.*
Vermont, 1932
Clarke, Richard Norton — *Upper Montclair, N. J.*

Clay, Ruth Evelyn	*Lincoln*
Cleaves, Frances McNeal	*Elkton, Md.*
Clotworthy, Mary Elizabeth	*Pittsburgh, Pa.*
Clough, Stella Josephine, B.S., M.A. Columbia, 1928, 1931	*Montclair, N. J.*
Colson, Vernita Gertrude	*Stockton Springs*
Conlon, Katherine	*New Cumberland, W. Va.*
Conners, Betsey Boyd	*Bangor*
Cooper, Helen, A.B. Brown, 1921	*Attleboro, Mass.*
Corcoran, Patrick J.	*New London, Conn.*
Costrell, Edwin Solomon	*Bangor*
Cox, Julia Bridget	*Freeport*
Crane, Frederick Beach	*Afton, N. Y.*
Crane, Percy Fremont, B.S. Bowdoin, 1917	*Orono*
Crowe, Nathalie Lillian	*West Roxbury, Mass.*
Crowley, James Harold	*Macwahoc*
Crowley, Joseph Patrick, B.S., M.S. College of City of New York, 1930, 1935	*Brooklyn, N. Y.*
Crowley, Marjorie Alexis, B.A., M.A. Barnard, 1931; Columbia, 1934	*Brooklyn, N. Y.*
Currier, Helen Lambert	*Brewer*
Cutter, Ivel Helen, B.A. Maine, 1935	*Bangor*
Cyr, Anne Marie	*Fort Kent*
Dalrymple, Stewart Willard	*Newton Center, Mass.*
Damon, Pearl Rebecca	*Stetson*
Davies, Harriet Poole, B.S., A.B., M.A.	*Old Forge, Pa.*
Davies, William Ellis	*Orono*
Davis, Frederick Venning	*Portland*
Day, Charlotte Usher	*Princeton*
Day, Maurice Goodwin	*Princeton*
Dean, Arvilla Richter	*Mentor, Ohio*
Deering, Mary Lowell	*Orono*
Dente, Anthony Carmine	*Mt. Vernon, N. Y.*
Desjardins, Ruth Ursula	*Old Town*
Devereux, Mary Eileen, B.S. New Hampshire, 1933	*Somersworth, N. H.*
Dickerson, Bernice Ethel	*Biddeford*
Donworth, Margaret Mary	*Machias*

Dority, Anna Howard	*Old Town*
Dorr, Harry C.	*Oak Bluffs, Mass.*
Dow, Lenora Dorothy	*Rumford*
Dowe, Dora Edna	*Old Town*
Drinkwater, Edna Antoinette	*Belfast*
Drummond, Elizabeth Beverly	*Orono*
Dunbar, Marion Phoebe	*East Belfast*
Duncan, Bertha	*Buffalo, N. Y.*
Dunn, Eloise Pendleton	*Thomaston*
Dwyer, Caroline Pierce	*North Amity*
Eames, Butler Matthews	*Hartford, Conn.*
Ela, Benjamin Walter, Jr.	*North Anson*
Esancy, Mabel Emma	*Union*
Fales, Joan Elinor	*Waterville*
Farrin, Muriel Mae	*South Bristol*
Feindel, Margaret Elizabeth, B.S. in Ed. New Hampshire, 1935	*Berlin, N. H.*
Ferguson, Alfred Stoddard, A.B. Colby, 1937	*Belfast*
Fernandez, Ramon Fernando	*Old Town*
Fey, John Theodore	*Cumberland, Md.*
Fisher, George Norton	*Wakefield, Mass.*
Folsom, Marjorie Gould	*East Corinth*
Foss, Natalie Meta	*Rochester, N. H.*
Foster, Samuel Lattimore, Jr., B.S. Mississippi State College, 1935	*Hudson Falls, N. Y.*
Fournier, Arthur Louis	*Chisholm*
Fowler, Leonard William	*Greenville*
Fredenburg, William	*Beaver Falls, N. Y.*
Friend, Ethel Louise	*Etna*
Gaetz, Leonard Halley	*White Plains, N. Y.*
Gaetz, Robert Dalmain	*White Plains. N. Y.*
Gagne, Alphonse	*Old Orchard*
Gagnon, Josephine Mary	*Vergennes, Vt.*
Galloway, Helen Esther, B.S. Columbia, 1935	*West Caldwell, N. J.*
Gibson, Edward Brooke	*Washington, Conn.*
Gillin, Hazelle Delano	*Bangor*
Gillis, Charles Francis	*Calais*

Gillis, Minnie Nesbit	*Calais*
Gilman, Stella Booker	*Brewer*
Gleason, Magnus Clyde	*Glens Falls, N. Y.*
Grace, Donald Frye	*Harrington*
Grant, Buford Leach	*Bangor*
Gray, Preston	*Brookline, Mass.*
Griffin, Elizabeth Frellick, A.B. Mount Holyoke, 1920	*Livermore Falls*
Griffin, William Frank	*Pittsfield*
Guild, Mary Andrews	*Fort Fairfield*
Gustin, Dorothy Ida	*Bangor*
Guyette, Muriel Olive	*Woonsocket, R. I.*
Hahn, Helen Moister	*Brooklyn, N. Y.*
Hall, Norman Charles	*Dalton, Mass.*
Hall, Roscoe Bowers	*Bethlehem, Pa.*
Hamm, Charlotte Cross	*South Paris*
Hanna, Priscilla Maxine	*Portland*
Hardison, Louise Arey	*East Orange, N. J.*
Harper, Olive Alexine	*Philadelphia, Pa.*
Harquail, Edna Clement	*Winterport*
Harvey, Ilga Frances, A.B., LL.B. Wesleyan, 1906; American Extension University, 1930	*New Britain, Conn.*
Hastings, Madeline Dorotha	*Montpelier, Vt.*
Hatfield, Lloyd Douglas	*Brewer*
Hathaway, Maxine Rebecca	*Bangor*
Hayes, Marion Frances	*Bangor*
Heal, Durward Sawyer, B.S. Colby, 1928	*Bangor*
Heck, Helen Henderson	*Glenside, Pa.*
Hewett, Amber Susie	*North New Portland*
Higginbotham, Richard Dana	*Watertown, Mass.*
Hill, Hazel, A.B. Tufts, 1931	*Kingston, Mass.*
Hinkley, Philip Joseph	*Westbrook*
Holman, Helen Houston	*Bangor*
Holt, Martha Hannah	*Pawtucket, R. I.*
Hunt, William Harry	*Augusta*
Hussey, Ruby Young	*Bradley*

Jackson, Jennie May	*Old Town*
Jellison, Howard Lozier	*Surry*
Johnson, Clara Marie	*Washington, Conn.*
Johnson, Edward Axel	*Washington, Conn.*
Johnson, Elspeth Burnett	*Gloucester, Mass.*
Johnson, Mildred Ruth	*Caribou*
Johnston, Mary Lois	*Glenbrook, Conn.*
Jones, Clyde Percival	*Bangor*
Jones, James Earle	*Hartford, Conn.*
Jowdry, Earle Edward	*Brownville*
Keef, Charles Dodge	*Vanceboro*
Keithley, Mary Conner	*Elkton, Md.*
Kelley, Anne Marguerite	*Walpole, Mass.*
Kelley, Winfred Alvin	*Waterville*
Kierstead, Elsie Leilla	*Merrimac, Mass.*
Kinloch, Lucy Margaret	*Brooklyn, N. Y.*
Kirkland, Robert Corwin	*Indian Orchard, Mass.*
Knapp, Leda Burrill	*Old Town*
Knight, Mervin Taber	*Newton Center, Mass.*
Kuchta, Mary Ann	*Alderson, Pa.*
Kyle, Winifred D.	*Patten*
Laffin, Catherine Scribner	*Ellsworth*
Lamb, Laura, B.S., M.S. University of Pennsylvania, 1910, 1922	*Philadelphia, Pa.*
Lamson, Marguerite Brechhuhler, B.S. Connecticut State, 1934	*Orono*
Landvoigt, Thomas Elmer, Jr.	*Jacksonville, Fla.*
Larlee, Mildred Bradstreet, B.A. Maine, 1933	*Monarda*
Lawrence, Charles Frye	*Harrington*
Lawrence, Gertrude Borst	*Haverhill, Mass.*
Leighton, Berenice Maude	*Harrington*
Leslie, Phyllis Elizabeth	*Kittery*
Levasseur, Clifford Joseph	*Grand Isle*
Levenson, Roger	*Bangor*
Lichtenberg, Louis, B.S. New York University, 1929	*Jamaica, L. I., N. Y.*
Lincoln, Margaret G., B.S. Massachusetts State, 1928	*Shirley, Mass.*

Linnell, Ruth Howe	*Pembroke*
Liscomb, Mary Elizabeth	*Bar Harbor*
Lombardi, Philomena Catherine	*Somerville, Mass.*
Lombardi, Susanne Marie	*Somerville, Mass.*
Long, Cecile Elizabeth	*Fort Kent*
Lord, Bernice Helen	*Bangor*
Lord, Mabel Prince	*Winterport*
Lowell, Roger Dwight, B.A. Bowdoin, 1933	*Lee*
Lowrie, Ruby F.	*Seal Harbor*
Lynch, Margaret Viola	*Bangor*
Lynch, Owen Albert	*Bangor*
McAllister, Mabel Bessie	*Milford*
McBurney, Florence May	*Rumford*
McCain, Helen Elizabeth	*Houlton*
McCall, Dorothy Texas	*Washington, D. C.*
McCarthy, Mary Elizabeth	*Bangor*
McCobb, Helen Gertrude	*Center Lincolnville*
McConachie, Adele Jessie	*Springfield, Mass.*
McCormick, Emmett S.	*Oakmont, Pa.*
McCormick, Rose Caroline	*Concord, N. H.*
McElwee, Olive May	*Houlton*
McGee, Maude Ellen	*Orono*
McGrath, Frances Ann	*Waterbury, Conn.*
McGrath, Patricia Agnes	*Waterbury, Conn.*
McGraw, Helen Elizabeth	*Andover, Mass.*
McGuire, Mildred Eddy	*Bangor*
McKenney, Ned Burr	*Williamsburg, Mass.*
McLaughlin, Ruth Helen	*Washburn*
McLean, James Allan, Jr.	*Bangor*
MacMillan, Ruth Ferguson	*Prospect Park, Pa.*
Mann, Ivie Wendell	*Orrington*
Marquis, Theresa Marie	*Fort Kent*
Marston, Leslie Gembrook	*Westbrook*
Martin, Jane Roberta	*Providence, R. I.*
Mather, Russell Montdrake, B.L. Illinois, 1935	*Alton, Ill.*
Matter, Alice Mathilde	*College Point, N. Y.*
Mayo, Donald Babson	*Cumberland Center*
Mayo, John Hildreth	*Cumberland Center*

Mealey, Philip Rittal — *Machias*
Mears, Natalie Maudsley — *Essex, Mass.*
Mervine, Jane Strine, A.B. — *Sheffield, Pa.*
Hood College, 1935
Michaud, Angeline Morneault, B.A. — *Fort Kent*
Maine, 1927
Miller, Fannie Butcher, B.S., M.A. — *Elmer, N. J.*
Cornell University, 1925; Columbia, 1935
Mitchell, Barbara Nadine — *Waterville*
Mitchell, Lettice Sarah — *Brookfield, Mass.*
Moore, Eugene Lincoln — *Houlton*
Moore, Etta Elizabeth, A.B. — *Attleboro, Mass.*
Brown, 1931
Moore, Janice Rachel — *Bangor*
Moors, Vivian Imogene, B.A. — *Orono*
Maine, 1933
Morin, Marie Gabrielle — *Mexico*
Mullan, Alice Maria — *Ellsworth*
Munson, Margaret Glenn — *Windham, N. Y.*
Mushlin, Rose Mae — *Portland*

Neale, Leander Martin — *East Machias*
Nelson, Basil St. Clair — *East Millinocket*
Nichols, Louise Blake — *Dover-Foxcroft*
Novak, Helene Anne — *Bangor*
Noyes, Shelton Chase — *Rumford*

Ober, Maude Ethel, B.R.E. — *Chagrin Falls, Ohio*
Boston University, 1929
Oberg, Florence Beal — *Bridgton*
O'Brien, Marion Cecelia — *Newburgh, N. Y.*
O'Hear, Hugh Joseph — *Bangor*
Oliver, Cleo Alberta — *Dexter*
Oxner, Karl Robert — *South Berwick*

Parsons, Marion Stuart — *Bangor*
Patterson, Caroline Annie — *Gardiner*
Patterson, Constance Winslow — *Camden*
Paul, Bertha Lavina — *Skowhegan*
Perry, Lou Ann — *East Hampden*
Perry, Mary Katherine, B.A. — *Orono*
Maine, 1936

Peterson, Bernese Loretta, A.B., A.M. *Orono*
Kansas, 1909, 1914
Phillips, Florence Mildred *Oneonta, N. Y.*
Phillips, James William, B.A. *Woodbury, N. J.*
New York State College for Teachers, 1920
Pickering, Carl Wyvern, B.A. *Deer Isle*
Maine, 1933
Pierce, Patricia Anna *Fort Amador, C. Z.*
Pike, John Warren *Fryeburg*
Pinette, Marion Etta *Fort Kent*
Plimpton, Robert Hall *Newton Center, Mass.*
Plummer, Maxine Margaret *Dubuque, Ia.*
Poland, Kathleen Viola *Rumford*
Porter, Elizabeth Kerr, B.S., M.S. *Philadelphia, Pa.*
Columbia, 1934; University of Pennsylvania, 1936
Pray, Elva *Hempstead, L. I., N. Y.*
Puffer, Roberta *Columbia*

Qualey, Philip Paul, B.A., M.A. *Dover, N. H.*
New Hampshire, 1931; Columbia, 1933

Raby, Adrienne Marie, A.B., LL.B. *New Britain, Conn.*
Smith, 1914; American Extension University, 1930
Rae, Benjamin Garfield, Jr. *West Newton, Mass.*
Rand, Beatrice Mable *Bangor*
Rasmussen, Dorothy Sophia *Montclair, N. J.*
Rasmussen, Louisa Charlotte *Montclair, N. J.*
Reid, Mary Louise *Bangor*
Reynolds, Charles Ansel, A.B. *Lamoine*
Harvard, 1933
Rhodes, Annie May *Union*
Rivinius, Ellen Marian *Winchester, Mass.*
Robinson, Glenn Meredith *Bangor*
Ross, Elva Bertha *Phillips*
Roundy, George *Walpole, Mass.*
Ruben, Howard *Belfast*
Rugan, Gladys Marie *Houlton*
Ruland, Mary Eliza *Nineveh, N. Y.*
Russell, Sarah Louise *Ellsworth*
Ryall, Dorothy Elizabeth *Sebago Lake*

Sadler, Charlotte Abbott	*Ellsworth*
Sanborn, Jean Cummings	*Bangor*
Sanborn, Jeannette Winter	*Bangor*
Shannon, Clayton William	*St. Petersburg, Fla.*
Shibles, Perry Foster	*Dover-Foxcroft*
Silk, Ernest Samuel, B.A., M.S. Yale, 1926, 1931	*New Haven, Conn.*
Simoneau, Leo Frank	*Chilholm*
Smeaton, Alice Ogden, B.S. in Ed. Columbia, 1932	*Hillside, N. J.*
Smith, Charlotte Boynton	*Bangor*
Smith, Marion	*Keene, N. H.*
Smith, Sara Ross, B.S. Johns Hopkins, 1930	*York, Pa.*
Smith, Thirma Helen	*Bangor*
Soule, Laurence William	*Augusta*
Southworth, Mary Stratton, B.S. Simmons, 1930	*Stoughton, Mass.*
Sprague, Edna Louise	*Bangor*
Stairs, Ina Eugina	*Stillwater*
Stevens, Katherine Irene	*Smyrna Mills*
Stewart, Donald Charles	*Cornwall, Ont.*
Stinchfield, Philip Alston	*Monson*
Stobie, Frances Martha	*Waterville*
Stromback, Elena Sprague	*Bangor*
Stromback, Stanford Alexander	*Monson*
Strout, Francis Leroy	*Milbridge*
Sturgis Frederic Sweeney	*Portland*
Sutton, Mary-Hale	*West Roxbury, Mass.*
Swartzwelder, Roland Meese, B.S. Susquehanna University, 1927	*Salisbury, Pa.*
Szaniawski, Edward William	*Scarsdale, N. Y.*
Tanner, Alfreda Mae, B.A. Maine, 1936	*South Portland*
Taylor, Charles Evans	*Belfast*
Taylor, Clyde Churchill	*Farmington*
Taylor, Harold Stone	*Bangor*
Taylor, Mary Elsie	*Camden*
Thompson, Mildred Ada	*Orono*
Thorne, Pamelia Melcher	*Turner Center*
Toothaker, Eleanor Alice	*Pittsfield*

Tornquist, Anna Baird	*Chagrin Falls, Ohio*
Tripp, Lelia Knowles	*Salisbury Cove*
Tripp, Lena Muriel	*Salisbury Cove*
Vail, Dorothea Agnes	*Cornwall-on-Hudson, N. Y.*
VanNostrand, Elaine Elizabeth	*Somerville, N. J.*
Violette, William Andrew	*Balboa, C. Z.*
Wallace, Jennie Rebecca	*Lubec*
Watson, Carline Wilda	*Bangor*
Watson, Frederick Earl	*Leicester, Mass.*
Watson, Grace Madeline	*Oakland*
Webber, Lewis Ervin	*Saco*
Webster, Ashley Joseph	*Castine*
Wedge, Dorothy Elizabeth	*Bridgeport, Conn.*
Weekes, Maude K., B.A., M.A. Wisconsin, 1927; Cornell University, 1928; Middlebury, 1932	*Watertown, N. Y.*
Weeks, Gertrude	*Patten*
Welch, Elizabeth	*Portland*
Welch, Lucile Anna, B.S. Syracuse, 1931	*Fairport, N. Y.*
Wellington, Agnes Ward	*Bangor*
Wentworth, Marjorie Lee	*Bangor*
Wescourt, Emanuel, B.A. Syracuse, 1925	*Brooklyn, N. Y.*
Weymouth, Frank Leslie Day, A.B. Clark, 1925	*Boston, Mass.*
Weymouth, Hilda Elzira	*Morrill*
Wheeler, Alfreda Emily	*Bethel*
Whight, Grace Lois	*Bangor*
Whittaker, Mary Jane, B.S. William and Mary, 1935	*Sheffield, Pa.*
Wiken, Erlon Harcourt	*Rumford*
Williams, Alice Eudora	*East Longmeadow, Mass.*
Williams, Emma Louise	*Boothbay Harbor*
Witham, Robert Oliver	*Anson*
Wong, Helen Elizabeth	*Bangor*
Wood, Amy Sheppard	*Bangor*
Woodland, Edwin Conrad	*Watertown, Mass.*
Works, Theone Mary, A.B. Boston University, 1931	*Brookfield, Mass.*

Wray, Maud E. *Wilkinsburg, Pa.*
Wright, Flora Blanche *Camden*

Young, Agnes Mildred, B.S. in Ed., M.S. in Ed.
Boston University, 1926, 1936 *Ellsworth*
Young, Barbara Jean *Fort Fairfield*
Young, Shirley Cynthia, B.A.
Maine, 1934 *Lincolnville Beach*

STUDENTS AT MARINE BIOLOGICAL STATION, LAMOINE

Burke, Timothy Francis, A.B.
Catholic University, 1929 *Scranton, Pa.*
Golden, Abner *New York, N. Y.*
Jellison, Arthur W. *Boothbay Harbor*
Otis, Arthur Brooks, B.A., M.Ed.
Maine, 1935; Springfield College, 1937 *Bridgton*
Paradise, Constance B., A.B.
Hunter College, 1937 *Kew Gardens, L. I., N. Y.*
Reif, Charles Braddock, B.A.
Minnesota, 1935 *Minneapolis, Minn.*
Rowe, Catharine Lancaster *Bangor*
Scully, James Malachy, A.B.
Catholic University, 1932 *Washington, D. C.*
Smith, Lloyd Lyman, B.A.
Minnesota, 1931 *Minneapolis, Minn.*
Sparrow, Dorothy Katherine *Indianapolis, Ind.*

Summary of Student Enrollment

1937-1938

	Total	Men	Women
Graduates	45	34	11
Seniors	354	255	99
Juniors	319	215	104
Sophomores	435	321	114
Freshmen	515	384	131
Specials	49	41	8
Upperclass students conditioned for admission	11	10	1
Two-Year Agriculture			
1st year	27	27	—
2nd year	18	18	—
Short Course in Agriculture	12	12	—
	1785	1317	468
Summer Session	516	193	323
Grand Total (omitting duplicates in Summer Session)	2251	1484	767
Classification by Colleges			
Graduate Study	45	34	11
College of Agriculture	636	458	178
College of Arts and Sciences	574	329	245
College of Technology	475	474	1
School of Education	55	22	33
	1785	1317	468
Candidates for Degrees			
Graduate Study	29	20	9
College of Agriculture	572	395	177
College of Arts and Sciences	557	317	240

College of Technology	455	454	1
School of Education	50	19	31
	1663	1205	458

Classification by Residence

Maine, by counties:

Androscoggin	59	
Aroostook	173	
Cumberland	216	
Franklin	32	
Hancock	98	
Kennebec	90	
Knox	61	
Lincoln	35	
Oxford	66	
Penobscot	510	
Piscataquis	41	
Sagadahoc	24	
Somerset	60	
Waldo	64	
Washington	69	
York	84	
		1682

Maine	1682
Massachusetts	253
New York	98
Connecticut	55
New Jersey	38
Pennsylvania	24
New Hampshire	18
Rhode Island	12
Vermont	12
Ohio	9
Florida	7
Maryland	5
Virginia	4
District of Columbia	3
Illinois	3

Michigan	2
Minnesota	2
Missouri	2
West Virginia	2
Delaware	1
Indiana	1
Iowa	1
Montana	1
Tennessee	1
Texas	1
Wisconsin	1
Canada	7
Canal Zone	3
Brazil	1
China	1
France	1
	2251

Index